ADF&G TECHNICAL DATA REPORT NO. 1
(Limited Distribution)

STATE OF ALASKA
William A. Egan, Governor

BRISTOL BAY SOCKEYE SALMON (Oncorhynchus nerka) 1968

A Compilation of Catch and Escapement Data

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ALASKA DEPARTMENT OF FISH AND GAME
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ADF&G TECHNICAL DATA REPORTS

This series of reports is designed to facilitate prompt reporting of data from studies conducted by the Alaska Department of Fish and Game, especially studies which may be of direct and immediate interest to scientists of other agencies.

The primary purpose of these reports is presentation of data. Description of programs and data collection methods is included only to the extent required for interpretation of the data. Analysis is generally limited to that necessary for clarification of data collection methods and interpretation of the basic data. No attempt is made in these reports to present analysis of the data relative to its ultimate or intended use.

Data presented in these reports is intended to be final, however, some revisions may occasionally be necessary. Minor revision will be made via errata sheets. Major revisions will be made in the form of revised reports.

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INTRODUCTION

This publication is the sixth in a series intended to annually present catch and escapement statistics for the Bristol Bay sockeye salmon fishery.

Personnel of the Alaska Department of Fish and Game's Commercial Fisheries Division collected and analyzed all data. Personnel of the Commercial Fisheries Division, Management and Research Sections of the Alaska Department of Fish and Game and the Department of Administration Data Processing Division furnished all the data tabulations. Scientists participating in the tabulation and analysis of these data includes: Mr. Kenneth Middleton, Mr. Robert Paulus, Mr Michael Nelson, Mr. Donald Siedelman, Mr. Glen Van Valin, Mr. Mel Seibel, Mr. Darwin Biwer, Mr. Steven Pennoyer and Mr. Michael McCurdy. Many additional personnel also participated in the collection and preliminary tabulation of these data. Mrs. Diane King, Mrs. Penny Locke and Mrs. Sue Bevel served as typists for the final report. Mr. Robert Paulus, and Michael McCurdy served as editors and assembled this material in its present form.

METHODS AND MATERIALS

These data were collected by field crews stationed at counting towers and at selected canneries throughout the Bristol Bay area. Figure 1 shows the relative location of the various sampling stations. Each sampling station was supplied with a caliper or measuring board, appropriate forms, and gum cards and pressed to form plastic impressions. Lengths were

recorded to the nearest millimeter and weights to the nearest one tenth of a pound.

Statistical analysis of the absolute error incurred in the estimation of the proportion of a given age class in a population of the magnitude encountered in Bristol Bay indicated that a minimum sample size of 150-200 fish per time period was required. Since considerable difference exists between the age composition of male and female sockeye salmon, particularly in the commercial catch, sampling requirements are set separately for the two sexes. Therefore, a sample size of 400 fish per time period was required. Taking into account imbalances in the sex ratio, illegible or missing scales and the sampling of species other than sockeye salmon, a sample size requirement of 600 fish per time period was set. The time periods were set as a fishing period for the commercial catch and three days for the escapement. If a lack of fish did not allow the attainment of this goal the successive periods were grouped to acquire the required minimum number of fish per sex.

Escapement counts and samples of the fish in the escapement were obtained for ten of the sockeye salmon spawning systems in Bristol Bay accounting for over 90 percent of the known spawning escapement. The systems sampled were Ugashik, Egegik, Naknek, Branch, Kvichak, Igushik, Wood, Nushagak, Nuyakuk, and Togiak. In addition aerial surveys were conducted to obtain estimates of the sockeye salmon escapements to the Snake and Kulukak Rivers, and the Togiak tributaries. Escapement counts were made from elevated towers (either mounted in boats or on the shore) located along the banks of the rivers. Counts were made for ten minutes out of the hour for each side of the river, multiplied by six to obtain hourly estimates and summed to obtain daily estimates.

Escapement sampling was carried out daily when possible. In all cases sampling crews used beach seines for capture gear and attempted to obtain approximately 200 fish per day. Sex, length and a scale were obtained from all fish captured. At times the sampling effort fell below the desired level. Mainly this was due to interference of poor weather and lack of migrating salmon.

Catch figures given herein are final catch figures tabulated from punch cards obtained from fish ticket receipts. Chum salmon, which are mixed with the sockeye salmon catch on many of the fish ticket receipts were deducted from the total catch by district and by period to yield a final sockeye salmon catch. Percentages of chum salmon in the catch for the Naknek-Kvichak, Egegik, and Ugashik districts were obtained through combinations of random catch sampling and cannery catch reports.

Due to the greater number of chums in the catch a different system is used for the Nushagak and Togiak districts. In the Nushagak district, species are separated in the set net and drift skiff catch so the actual fish ticket figures are used. Chum percentage in the boat drift net catch is derived by averaging the chum percentages by period reported by the two largest canneries in the district. In the Togiak district species were separated on the fish tickets.

The catch was sampled at five locations throughout the Bay. The sampler at the Alaska Packers Association NN plant sampled the Egegik catch and one-half the required sample from the Ugashik catch. The sampler at the Red Salmon cannery at Naknek sampled the Naknek-Kvichak catch and one-half the required sample from the Ugashik catch. Igushik and Nushagak catches were sampled at the Columbia Wards Fisheries Ekuk plant. Miscellaneous samples from the Nushagak district were taken at

the Pacific Alaska Fisheries cannery at Dillingham. The Togiak district catch was sampled at the Togiak Fisheries cannery at Togiak.

The cannery fish samples were taken by selecting fish randomly from the conveyor belts as the salmon moved into the cannery storage bins. With the exception of the Togiak district, fish were taken from the belt without regard to species (sockeye or chum) and placed in specially constructed sampling bins to facilitate the taking of data. In the Nushagak district chums were removed from the sampling bins, counted and returned to the belt. In the Ugashik, Egegik, and Naknek-Kvichak districts, both chums and sockeyes were sampled and separated later on the basis of scale analysis. In the Togiak district the different species were sampled separately.

The samplers were instructed to obtain a sample of 600 fish per district per fishing period. In the case of periods being extended more than five days total or if the 600 fish sample was taken prior to any extension, they were instructed to obtain a 120 fish sample for each additional day or portion thereof. Samplers were instructed to spread their period sample over as many scow loads as possible to insure a representative sampling of the catch. A maximum sample of 200 fish per scow load was set. Set net catch deliveries were sampled as time allowed, but, except in the Nushagak, primary importance was attached to sampling the drift net catch on the scows since it represents the largest proportion of the total catch. Also, the drift catch is thought to be more representative of the catch as a whole since it is not restricted to any one part of a fishing district. In the following catch tables the "numbers of samples" refers to the number of different scow loads, or

truck loads of fish sampled each fishing period. In the escapement "number of samples" refers to the number of days sampled.

Weights, lengths and scales were taken from 150 fish of each sex during the peak of the catch in each district. Also, length, sex, and a scale were taken from every fish sampled in both catch and escapement.

Data for the north side of the Alaska Peninsula were collected by Alaska Department of Fish and Game personnel working out of Cold Bay.

In this report, remarks appropriate to each district are included with the data for that district. A map of each fishing district is also included.

Age designation used throughout this paper is the Gilbert-Rich notation instead of the European.

Gilbert-Rich	European	
3_2	1.1	One winter in freshwater, one winter in ocean, in third year.
4_3	2.1	Two winters in freshwater, one winter in ocean, in fourth year.
5_4	3.1	Three winters in freshwater, one winter in ocean, in fifth year.
3_1	0.2	No winter in freshwater, two winters in ocean, in third year.
4_2	1.2	One winter in freshwater, two winters in ocean, in fourth year.
5_3	2.2	Two winters in freshwater, two winters in ocean, in fifth year.
6_4	3.2	Three years in freshwater, two winters in ocean, in sixth year.
4_1	0.3	No winters in freshwater, three winters in ocean, in fourth year.
5_2	1.3	One winter in freshwater, three winters in ocean, in fifth year.
6_3	2.3	Two winters in freshwater, three winters in ocean, in sixth year.
7_4	3.3	Three winters in freshwater, three winters in ocean, in seventh yea
6_2	1.4	One winter in freshwater, four winters in ocean, in sixth year.
7_3	2.4	Two winters in freshwater, four winters in ocean, in seventh year.

It is the purpose of this report to present these statistics in a form which will serve the needs of scientists concerned with this fishery.

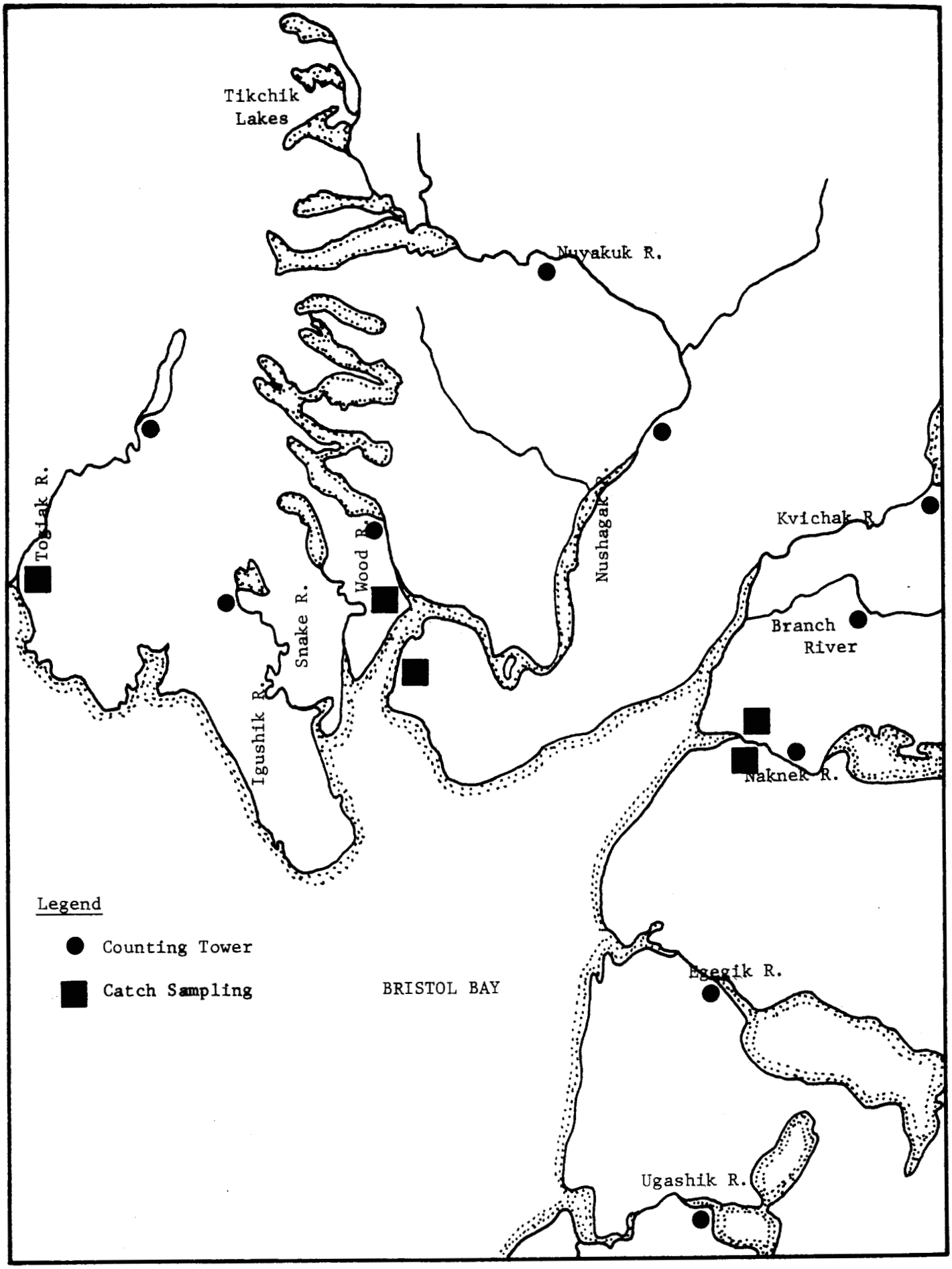

FIGURE 1. APPROXIMATE LOCATIONS OF CATCH SAMPLING AND COUNTING TOWER, BRISTOL BAY, 1968.

TABLE 1

1968 BRISTOL BAY SOCKEYE SALMON RETURN

System	Catch	Escapement	Total Return
Kvichak River	387,565	2,557,440	2,945,005
Branch River	61,111	193,872	254,983
Naknek River	768,182	1,023,222	1,791,404
Total Naknek-Kvichak	1,216,858	3,774,534	4,991,392
Egegik River	671,554	338,654	1,010,208
Ugashik River	82,457	70,896[3/]	153,353
Wood River	406,617	649,364	1,055,961
Igushik River	244,888	194,508	439,396
Snake River	-	4,100[1/]	4,100
Nuyakuk River	71,111	96,642	167,753
Nushagak-Mulchatna	26,665	32,070	58,735
Total Nushagak-Igushik	749,281	976,664	1,725,945
Togiak River	72,699	42,918	115,617
Togiak Tributaries	-	7,000[1/]	7,000
Kulukak System[2/]	-	6,500[1/]	6,500
Total Togiak District	72,699	56,418	129,117
Total Bristol Bay	2,792,849	5,217,166	8,010,015

1/ Escapement estimates based on aerial surveys of spawning grounds.
2/ Salmon harvested in this system are included in the Togiak district commercial catch.
3/ Mother Goose Lake escapement not included.

TABLE 2
1968 BRISTOL BAY SOCKEYE SALMON CATCH BY
DISTRICT AND FISHING PERIOD AND UNITS OF GEAR FISHING

Naknek/Kvichak District

Number	Fishing Period[1] Date and Time	Units of Gear[3] Hour[2]	Drift	Set	Sockeye Salmon Catch
4	- June 17 4 PM*		1	4	35
5	June 17 4 PM - June 19 4 PM*	48	131	101	4,099
6	June 21 6 AM - June 22 6 AM*	24	195	86	2,053
7	June 24 9 AM - June 25 9 AM*	24	334	109	47,513
8	June 27 11 AM - June 27 11 PM*	12	436	110	184,690
9	June 29 12 N - June 29 12 MN*	12	419	100	163,610
10	July 2 3 AM - July 2 3 PM*	12	452	134	150,385
11	July 5 4 AM - July 5 4 PM*	12			
	July 5 4 PM - July 6 4 AM*	12			
	July 6 4 AM - July 11 10 AM*°	126	1,495	471	629,648[4]
	July 11 10 AM - July 12 10 AM	24			
13	July 12 10 AM - July 13 9 AM	23			
14	July 15 9 AM -		463	235	34,825

* * Naknek Section only
° Naknek-Kvichak district opened 10 a.m. July 11

Total sockeye salmon catch Naknek/Kvichak 1,216,858

Total of 329 fishing hours during regulatory period June 17 - July 13

Egegik District

4	- June 17 3 PM		28	8	1,054
5	June 17 3 PM - June 19 3 PM	48	170	77	15,743
6	June 21 5 AM - June 22 5 AM	24	240	85	19,908
7	June 24 8 AM - June 25 8 AM	24	272	99	82.904
8	June 27 10 AM - June 27 10 PM	12	277	74	150,721
9	June 30 12 N - July 30 12 MN	12	294	100	215,220
10	July 4 4 AM - July 4 4 PM	12	278	112	180,836
11	July 15 9 AM - July 16 9 AM	(24)[4]	66	77	4,576
12	July 18 9 AM - July 20 9 AM	(48)	0	2	316
13	July 22 9 AM -		3	17	276

Total sockeye salmon catch Egegik 671,554

Total of 132 fishing hours during regulatory period June 17 - July 13

TABLE 2

1968 BRISTOL BAY SOCKEYE SALMON CATCH BY
DISTRICT AND FISHING PERIOD AND UNITS OF GEAR FISHING

Ugashik District

Number	Fishing Period Date and Time	Units of Gear Hour	Drift	Set	Sockeye Salmon Catch
4	- June 17 3 PM			0	37
5	June 17 3 PM - June 19 3 PM	48	22	16	603
6	June 21 6 AM - June 22 6 AM	24	40	18	1,163
7	June 24 8 AM - June 25 8 AM	24	47	31	3,264
8	June 27 10 AM - June 28 10 AM	24	50	35	12,598
9	June 30 12 N - July 1 12 N	24	52	33	9,561
10	July 3 3 PM - July 4 3 PM	24	54	34	18,031
11	July 7 6 AM - July 8 6 AM	24	53	36	22,078
12	July 15 9 AM - July 16 9 AM	(24)	52	32	8,300
13	July 18 9 AM - July 20 9 AM	(48)	36	10	5,466
14	July 22 9 AM -		43	16	1,356
	Total sockeye salmon catch Ugashik				82,457

Total of 192 fishing hours during regulatory period June 17 - July 13

Nushagagak - Igushik District

4	- June 17 5 PM		548	14	223
5	June 17 5 PM - June 18 5 PM	24	293	14	337
6	June 21 8 AM - June 22 8 AM	24	394	103	8,518
7	June 25 10 AM - June 26 12 N	26	461	123	152,550
8	June 28 2 AM - June 28 2 PM*	12	373	52	60,400
9	June 30 3 AM - June 30 3 PM	12	455	111	266,614
10	July 2 4 PM - July 3 4 AM*	12	451	54	41,940
11	July 4 6 PM - July 5 6 PM*	24			
	July 5 6 PM - July 7 12 N*	42	461	57	87,877[4/]
12	July 8 12 N - July 10 10 AM*	46			
	July 10 10 AM - July 11 10 AM	24	493	144	97,803[4/]
	July 11 10 AM - July 13 9 AM	47			
13	July 15 9 AM - July 20 9 AM	(120)	571	144	14,726
14	July 21 9 AM - Aug. 3 9 AM	(13 days)	821	178	16,733[4/]
	Aug. 3 9 AM - Aug. 10 9 AM	(7 days)	131	71	1,660[4/]

* Igushik Section only

Total sockeye salmon catch Nushagak-Igushik 749,281

Total of 293 fishing hours during regulatory period June 17 - July 13

TABLE 2 (cont.)

1968 BRISTOL BAY SOCKEYE SALMON CATCH BY
DISTRICT AND FISHING PERIOD AND UNITS OF GEAR FISHING

Togiak District

Number	Fishing Period Date and Time	Hour	Units of Gear Drift	Set	Sockeye Salmon Catch
4	- June 17 9 AM		39	0	106
5	June 17 9 AM - June 21 9 AM	96	81	0	1,159
6	June 24 9 AM - June 28 9 AM	96	95	3	18,351
7	July 1 9 AM - July 5 9 AM	96	96	4	21,748
8	July 8 9 AM - July 10 9 AM	48	95	2	11,704
9	July 17 9 AM - July 19 9 AM*	(48)	96	0	9,892
10	July 22 9 AM - July 26 9 AM	(96)	58	0	7,232
11	July 29 9 AM - Aug. 2 9 AM	(96)	55	0	2,442
12	Aug. 5 9 AM - Aug. 9 9 AM	(96)	3	0	0
13	Aug. 12 9 AM - Aug. 16 9 AM	(96)	39	0	65
14	Aug. 19 9 AM -				

Total sockeye salmon catch Togiak 72,699

Total of 336 fishing hours during regulatory period June 17 - July 13

* Includes 48 hour fishing period in Ungalikthluk section from 9 a.m. Monday, July 15 to 9 a.m. Wednesday, July 17.

1/ Fishing period numbers are the codings used to separate catches on the computer runs.

2/ Hours fished are listed in parenthesis for nonregulatory fishing periods.

3/ Units of gear determined from final computer run represents actual number of boats or set net units estimated to have fished.

4/ Part of catch made outside of regulatory period but since fishing times were continuous, the catch cannot be separated.

TABLE 3

1968 BRISTOL BAY SOCKEYE SALMON RETURN BY AGE GROUP, BY RIVER SYSTEM

AGE GROUP

River	3_1	3_2	4_1	4_2	4_3	5_1	5_2	5_3	5_4	6_2	6_3	6_4	7_3	7_4	Total
Kvichak	-	23,489	-	1,887,479	97,916	-	42,049	540,644	-	-	342,908	10,520	-	-	2,945,005
Branch	-	5,812	-	84,279	2,147	-	117,665	28,753	-	-	15,579	748	-	-	254,983
Naknek	-	4,630	-	378,323	22,726	-	327,631	704,733	-	1,722	333,941	10,667	-	7,031	1,791,404
Egegik	-	49	-	106,403	5,451	-	94,353	455,326	952	-	314,930	24,012	49	8,683	1,010,208
Ugashik	-	23	160	26,531	8,758	-	17,359	77,174	-	44	22,916	203	81	104	153,353
Igushik	-	83	709	164,502	94	-	228,243	33,678	-	377	11,543	-	-	167	439,396
Wood	1,618	886	4,941	355,870	426	-	593,693	60,555	-	4,632	32,358	-	445	537	1,055,961
Snake	-	-	-	1,655	-	-	2,136	211	-	-	98	-	-	-	4,100
Nuyakuk	158	-	780	13,114	-	-	150,185	1,971	86	180	1,201	-	-	78	167,753
Nushagak-Mulchatna	1,127	-	11,253	3,317	-	1,134	40,962	-	-	942	-	-	-	-	58,735
Togiak	159	90	1,050	40,799	-	-	61,682	17,520	-	110	7,673	-	-	34	129,117
Total Bay	3,062	35,062	18,893	3,062,272	137,518	1,134	1,675,958	1,920,565	1,038	8,007	1,083,147	46,150	575	16,634	8,010,015

TABLE 4

1968 BRISTOL BAY SOCKEYE SALMON RETURN, PERCENT OF EACH AGE GROUP BY RIVER SYSTEM

River	Age Group														
	3_1	3_2	4_1	4_2	4_3	5_1	5_2	5_3	5_4	6_2	6_3	6_4	7_3	7_4	Total
Kvichak	-	0.80	-	64.09	3.32	-	1.43	18.36	-	-	11.64	0.36	-	-	100.00
Branch	-	2.28	-	33.05	0.84		46.15	11.28	-	-	6.11	0.29	-	-	100.00
Naknek	-	0.26	-	21.12	1.27		18.29	39.34	-	0.10	18.64	0.59	-	0.39	100.00
Egegik	-	0.00	-	10.53	0.54	-	9.34	45.08	0.09	-	31.18	2.38	0.00	0.86	100.00
Ugashik	-	0.01	0.12	17.30	5.71	-	11.32	50.32	-	0.03	14.94	0.13	0.05	0.07	100.00
Igushik	-	0.02	0.16	37.44	0.02	-	51.94	7.67	-	0.08	2.63	-	-	0.04	100.00
Wood	0.15	0.08	0.47	33.70	0.04	-	56.22	5.74	-	0.44	3.07	-	0.04	0.05	100.00
Snake	-	-	-	40.36	-	-	52.10	5.15	-	-	2.39	-	-	-	100.00
Nuyakuk	0.09	-	0.46	7.82	-	-	89.53	1.17	0.05	0.11	0.72	-	-	0.05	100.00
Nushagak-Mulchatna	1.92	-	19.16	5.65	-	1.93	69.74	-	-	1.60	-	-	-	-	100.00
Togiak	0.12	0.07	0.81	31.60	-	-	47.78	13.57	-	0.08	5.94	-	-	0.03	100.00
Total Bay	0.04	0.44	0.23	38.23	1.72	0.01	20.92	23.98	0.01	0.10	13.52	0.58	0.01	0.21	100.00

TABLE 5

1968 BRISTOL BAY SOCKEYE SALMON RETURN
BY OCEAN AGE GROUP, BY RIVER SYSTEM

River	Ocean Age Group 1	2	3	4	Total
Kvichak					
No. of fish	121,405	2,438,643	384,957	0	2,945,005
Percent	4.12	82.81	13.07	0	100.00
Branch					
No. of fish	7,959	113,780	133,244	0	254,983
Percent	3.12	44.62	52.26	0	100.00
Naknek					
No. of fish	27,356	1,093,723	668,603	1,722	1,791,404
Percent	1.53	61.05	37.32	0.10	100.00
Egegik					
No. of fish	6,452	585,741	417,966	49	1,010,208
Percent	0.64	57.98	41.38	0.00	100.00
Ugashik					
No. of fish	8,781	103,908	40,539	125	153,353
Percent	5.73	67.76	26.43	0.08	100.00
Igushik					
No. of fish	177	198,180	240,662	377	439,396
Percent	0.04	45.10	54.77	0.09	100.00
Wood					
No. of fish	1,312	418,043	631,529	5,077	1,055,961
Percent	0.12	39.59	59.81	0.48	100.00
Snake					
No. of fish	0	1,866	2,234	0	4,100
Percent	0	45.51	54.49	0	100.00
Nuyakuk					
No. of fish	86	15,243	152,244	180	167,753
Percent	0.05	9.09	90.75	0.11	100.00
Nushagak-Mulchatna					
No. of fish	0	4,444	52,215	2,076	58,735
Percent	0	7.57	88.90	3.53	100.00
Togiak					
No. of fish	90	58,478	70,439	110	129,117
Percent	0.07	45.29	54.55	0.09	100.00
Total Bay					
No. of fish	173,618	5,032,049	2,794,632	9,716	8,010,015
Percent	2.17	62.82	34.89	0.12	100.00

Naknek-Kvichak District

The Naknek-Kvichak fishing district boundaries remained unchanged in 1968, and have been the same since 1964. Anticipating a small return to the Kvichak River system the Kvichak section remained closed to fishing until 10 a.m. July 11 to obtain the desired escapement level. Up to this time only the Naknek section was open to commercial fishing.

Regulations affecting gill net mesh size remained unchanged for Bristol Bay in 1968. Minimum mesh size for sockeye salmon was 5 - 3/8 stretched measure. The allowable length of gill net was only one-half of that allowed in 1967. This amounted to 75 fathoms per drift unit and 25 fathoms per setnetter.

Initial gill net registration, drift and set net, was 966. This represented a decrease of only 10 units, or one percent, when compared to 1967.

Data, based on fish ticket delivery tabulations, indicated a maximum effort occured July 8-11 when 721 deliveries were made for a sockeye catch of 221,241 or 18 percent of the total sockeye catch. The largest period catch occurred on July 5-7 when 342,231 sockeye were caught, representing 28 percent of the total catch. This catch occurred during the normal peak date of the Bristol Bay sockeye salmon run.

The 1968 Naknek-Kvichak sockeye salmon run of 4,991,392 constituted only 77 percent of the 1967 run, and only 43 percent of the average since 1955.

The Naknek-Kvichak sockeye salmon catch of 1,216,858 represented 44 percent of the total Bristol Bay sockeye catch. The pink salmon harvest was 218,732 which was four times as large as the 9 year average (Even years only). Only a moderate king salmon catch of 6,398 was realized. This represented 70 percent of the 18 year average but was almost twice as large as the 1967 catch. The chum salmon catch of 43,187 was low but comparable with those experienced from 1965 to 1967. The 1968 chum catch represented only 37 percent of the 18 year average. The coho salmon catch was 7,357. This is the highest coho catch since 1951 and is more than three times as large as the 18 year average.

Sockeye salmon returning to the Kvichak, Branch and Naknek rivers are harvested as mixed stocks in the Naknek-Kvichak district (Refer to Figure 2). The fish in the catch are apportioned to the individual river systems by the method described in Informational Leaflet 121 (McCurdy 1968).

FIGURE 2. 1968 NAKNEK-KVICHAK COMMERCIAL FISHING DISTRICT.

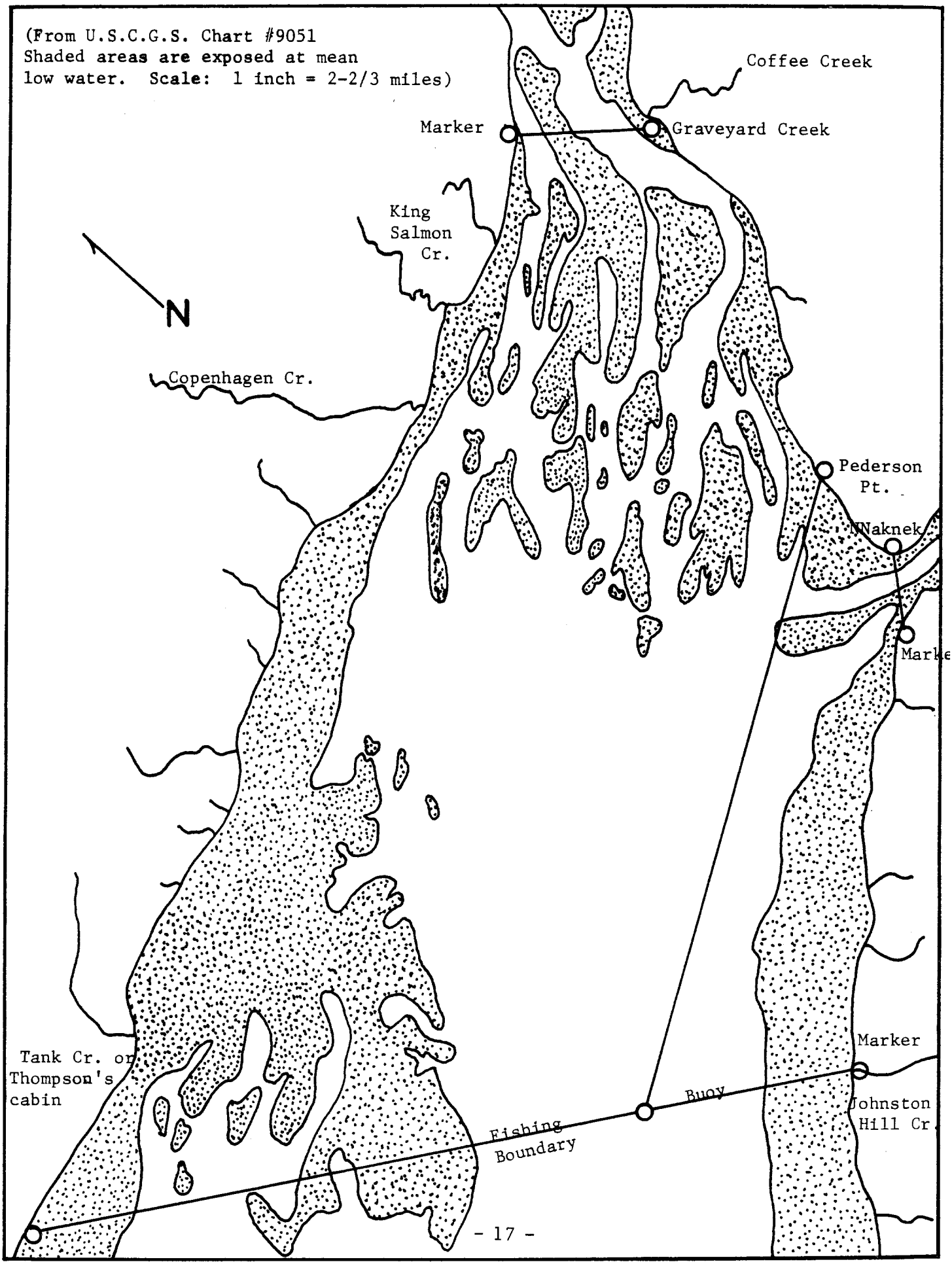

TABLE 6

NAKNEK-KVICHAK DISTRICT, CATCH AND ESCAPEMENT
BY AGE GROUP, SOCKEYE SALMON, 1968

	Age Group									
	3_2	4_2	4_3	5_2	5_3	6_2	6_3	6_4	7_4	Total
KVICHAK										
Escapement	22,669	1,656,922	93,510	35,319	461,837	-	278,970	8,213	-	2,557,440
Catch	820	230,557	4,406	6,730	78,807	-	63,938	2,307	-	387,565
Subtotal	23,489	1,887,479	97,916	42,049	540,644	-	342,908	10,520	-	2,945,005
Percent	0.80	64.09	3.32	1.43	18.36	-	11.64	0.36	-	100.00
NAKNEK										
Escapement	4,014	237,017	18,908	180,320	407,083	1,590	168,475	4,859	956	1,023,222
Catch	616	141,306	3,818	147,311	297,650	132	165,466	5,808	6,075	768,182
Subtotal	4,630	378,323	22,726	327,631	704,733	1,722	333,941	10,667	7,031	1,791,404
Percent	0.26	21.12	1.27	18.29	39.34	0.10	18.64	0.59	0.39	100.00
BRANCH										
Escapement	5,442	66,769	1,971	86,558	21,758	-	10,883	491	-	193,872
Catch	370	17,510	176	31,107	6,995	-	4,696	257	-	61,111
Subtotal	5,812	84,279	2,147	117,665	28,753	-	15,579	748	-	254,983
Percent	2.28	33.05	0.84	46.15	11.28	-	6.11	0.29	-	100.00
TOTAL NAKNEK-KVICHAK DISTRICT										
Escapement	32,125	1,960,708	114,389	302,197	890,678	1,590	458,328	13,563	956	3,774,534
Catch	1,806	389,373	8,400	185,148	383,452	132	234,100	8,372	6,075	1,216,858
Subtotal	33,931	2,350,081	122,789	487,345	1,274,130	1,722	692,428	21,935	7,031	4,991,392
Percent	0.68	47.09	2.46	9.76	25.53	0.03	13.87	0.44	0.14	100.00

TABLE 7

NAKNEK-KVICHAK COMMERCIAL CATCH
SEX COMPOSITION OF SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. in Samples		Percent		Commercial Catch	No. in Catch	
		Males	Females	Males	Females		Males	Females
6/17-6/26	6	221	185	54.43	45.57	53,700	29,229	24,471
6/27-6/28	5	272	281	49.19	50.81	184,690	90,849	93,841
6/29-7/1	3	237	248	48.87	51.13	163,610	79,956	83,654
7/2-7/4	3	250	262	48.83	51.17	150,385	73,433	76,952
7/5-7/7	3	187	160	53.89	46.11	342,231	184,428	157,803
7/8-7/21	13	160	232	40.82	59.18	322,242	131,539	190,703
TOTAL	33	1,327	1,368	48.44	51.56	1,216,858	589,434	627,424

TABLE 8

NAKNEK-KVICHAK COMMERCIAL CATCH
AGE COMPOSITION OF MALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group 3_2	4_2	4_3	5_2	5_3	6_3	6_4	7_4	Total
						Percent					
6/17-6/26	6	221	--	43.00	--	7.24	31.67	16.74	0.45	0.90	100.00
6/27-6/28	5	272	--	38.23	0.37	9.56	36.76	14.34	0.37	0.37	100.00
6/29-7/1	3	237	--	44.30	--	11.39	31.65	12.66	--	--	100.00
7/2-7/4	3	250	--	47.20	--	5.20	32.00	14.40	1.20	--	100.00
7/5-7/7	3	187	0.53	43.86	2.14	8.02	28.88	14.97	1.07	0.53	100.00
7/8-7/21	13	160	0.63	26.88	3.13	13.75	39.98	15.63	--	--	100.00
TOTALS	33	1,327									
WEIGHTED PERCENTAGES			0.31	39.64	1.42	9.60	33.48	14.72	0.56	0.27	100.00

TABLE 9

NAKNEK-KVICHAK COMMERCIAL CATCH
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group Percent							Total
			4_2	5_2	5_3	6_2	6_3	6_4	7_4	
6/17-6/26	6	185	15.14	16.76	31.89	0.54	35.13	--	0.54	100.00
6/27-6/28	5	281	17.08	18.15	33.10	--	30.25	--	1.42	100.00
6/29-7/1	3	248	25.40	31.86	17.34	--	24.19	0.81	0.40	100.00
7/2-7/4	3	262	24.43	17.56	24.05	--	32.05	0.76	1.15	100.00
7/5-7/7	3	160	30.60	18.13	28.13	--	20.63	1.88	0.63	100.00
7/8-7/21	13	232	25.00	20.26	36.64	--	17.24	0.43	0.43	100.00
TOTALS	33	1,368								
WEIGHTED PERCENTAGES			24.82	20.49	29.67	0.02	23.48	0.80	0.72	100.00

TABLE 10

NAKNEK-KVICHAK COMMERCIAL CATCH,
AGE COMPOSITION OF SOCKEYE SALMON,
BOTH SEXES COMBINED, 1968

	Age Group									
	3_2	4_2	4_3	5_2	5_3	6_2	6_3	6_4	7_4	Total
MALES:										
Number	1,806	233,630	8,400	56,605	197,310	--	86,785	3,322	1,576	589,434
Percent	0.31	39.64	1.42	9.60	33.48	--	14.72	0.56	0.27	100.00
FEMALES:										
Number	--	155,743	--	128,543	186,142	132	147,315	5,050	4,499	627,424
Percent	--	24.82	--	20.49	29.67	0.02	23.48	0.80	0.72	100.00
SEXES COMBINED:										
Number	1,806	389,373	8,400	185,148	383,452	132	234,100	8,372	6,075	1,216,858
Percent	0.15	32.00	0.69	15.21	31.51	0.01	19.24	0.69	0.50	100.00

TABLE 11

KVICHAK RIVER
FINAL RED SALMON DAILY ESCAPEMENT COUNTS

DATE	DAILY COUNTS	DAILY PERCENT OF COUNT	ACCUM. COUNTS
June 18	36	0.00	36
19	12	0.00	48
20	150	0.01	198
21	432	0.02	630
22	378	0.01	1,008
23	72	0.00	1,080
24	6	0.00	1,086
25	24	0.00	1,110
26	804	0.03	1,914
27	1,440	0.06	3,354
28	3,954	0.15	7,308
29	115,434	4.51	122,742
30	155,484	6.08	278,226
July 1	164,712	6.44	442,938
2	102,420	4.00	545,358
3	125,490	4.91	670,848
4	133,620	5.23	804,468
5	240,984	9.42	1,045,452
6	289,590	11.32	1,335,042
7	286,182	11.19	1,621,224
8	254,088	9.94	1,875,312
9	141,048	5.52	2,016,360
10	76,686	3.00	2,093,046
11	141,984	5.55	2,235,030
12	149,796	5.86	2,384,826
13	92,940	3.63	2,477,766
14	26,544	1.03	2,504,310
15	15,516	0.61	2,519,826
16	13,086	0.51	2,532,912
17	7,470	0.29	2,540,382
18	5,370	0.21	2,545,752
19	4,032	0.16	2,549,784
20	1,362	0.05	2,551,146
21	1,494	0.06	2,552,640
22	1,236	0.05	2,553,876
23	960	0.04	2,554,836
24	918	0.04	2,555,754
25	564	0.03	2,556,318
26	522	0.02	2,556,840
27	294	0.01	2,557,134
28	306	0.01	2,557,440
TOTAL	2,557,440	100.00	2,557,440

TABLE 12

KVICHAK RIVER ESCAPEMENT

SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. In Samples Males	Females	Percent Males	Females	Escapement	No. In Escapement Males	Females
6/18-7/1	14	186	217	46.15	53.85	442,938	204,416	238,522
7/2-7/4	3	272	219	55.40	44.60	361,530	200,288	161,242
7/5-7/7	3	216	214	50.23	49.77	816,756	410,256	406,500
7/8-7/10	3	264	201	56.77	43.23	471,822	267,853	203,969
7/11-	18	223	198	52.97	47.03	464,394	245,989	218,405
TOTAL	41	1,161	1,049	51.96	48.04	2,557,440	1,328,802	1,228,638

TABLE 13

KVICHAK RIVER ESCAPEMENT

AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group Percent							
			3_2	4_2	4_3	5_2	5_3	6_3	6_4	Total
6/18-7/1	14	186	1.08	54.30	3.76	3.76	21.51	15.59	--	100.00
7/2-7/4	3	272	--	73.90	2.57	1.47	15.07	6.99	--	100.00
7/5-7/7	3	216	1.85	65.28	7.41	--	18.06	6.94	0.46	100.00
7/8-7/10	3	264	1.52	72.34	11.36	0.76	9.85	4.17	--	100.00
7/11-	18	223	3.59	61.43	8.07	2.24	17.94	6.28	0.45	100.00
TOTALS	41	1,161								
WEIGHTED PERCENTAGES			1.71	65.60	7.04	1.37	16.46	7.60	0.22	100.00

TABLE 14

KVICHAK RIVER ESCAPEMENT

AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 4_2	5_2	5_3	6_3	6_4	Total
			Percent					
6/18-7/1	14	217	44.70	2.76	22.58	29.50	0.46	100.00
7/2-7/4	3	219	68.50	0.91	21.00	9.59	--	100.00
7/5-7/7	3	214	67.76	0.93	16.82	14.02	0.47	100.00
7/8-7/10	3	201	72.64	1.49	19.40	6.47	--	100.00
7/11-	18	198	66.16	1.01	21.72	10.10	1.01	100.00
TOTALS	41	1,049						
WEIGHTED PERCENTAGES			63.91	1.39	19.79	14.49	0.42	100.00

TABLE 15

KVICHAK RIVER ESCAPEMENT

AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group							
	3_2	4_2	4_3	5_2	5_3	6_3	6_4	Total
MALES:								
Number	22,700	871,704	93,512	18,176	218,759	100,957	2,994	1,328,802
Percent	1.71	65.60	7.04	1.37	16.46	7.60	0.22	100.00
FEMALES:								
Number	--	785,176	--	17,074	243,101	178,075	5,212	1,228,638
Percent	--	63.91	--	1.39	19.79	14.49	0.42	100.00
SEXES COMBINED:								
Number	22,700	1,656,880	93,512	35,250	461,860	279,032	8,206	2,557,440
Percent	0.89	64.78	3.66	1.38	18.06	10.91	0.32	100.00

TABLE 16

BRANCH RIVER
FINAL RED SALMON DAILY ESCAPEMENT COUNTS, 1968

Date	Daily Count	Daily % Of Count	Accum. Counts
June 18	0	0.00	0
19	12	0.01	12
20	0	0.00	12
21	0	0.00	12
22	0	0.00	12
23	0	0.00	12
24	0	0.00	12
25	0	0.00	12
26	6	0.00	18
27	0	0.00	18
28	2,724	1.41	2,742
29	22,764	11.74	25,506
30	6,654	3.43	32,160
July 1	3,738	1.93	35,898
2	15,396	7.94	51,294
3	13,008	6.71	64,302
4	17,496	9.02	81,798
5	25,194	13.00	106,992
6	17,052	8.79	124,044
7	17,160	8.85	141,204
8	8,742	4.51	149,946
9	2,844	1.47	152,790
10	4,524	2.33	157,314
11	21,084	10.87	178,398
12	5,790	2.99	184,188
13	1,530	0.79	185,718
14	1,620	0.84	187,338
15	2,154	1.11	189,492
16	2,148	1.11	191,640
17	1,368	0.71	193,008
18	648	0.33	193,656
19	114	0.06	193,770
20	36	0.02	193,806
21	66	0.03	193,872
TOTAL	193,872	100.00	193,872

TABLE 17

BRANCH RIVER ESCAPEMENT,
SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. in Samples		Percent		Escapement	No. in Escapement	
		Males	Females	Males	Females		Males	Females
6/18-7/21	34	176	216	44.90	55.10	193,872	87,048	106,824
TOTALS	34	176	216	44.90	55.10	193,872	87,048	106,824

TABLE 18

BRANCH RIVER ESCAPEMENT,
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group Percent						
			3_2	4_2	4_3	5_2	5_3	6_3	Total
6/18-7/21	34	176	5.11	36.93	1.70	43.76	6.82	5.68	100.00
TOTALS	34	176							
WEIGHTED PERCENTAGES			5.11	36.93	1.70	43.76	6.82	5.68	100.00

TABLE 19

BRANCH RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group Percent							
			3_2	4_2	4_3	5_2	5_3	6_3	6_4	Total
6/18-7/21	34	216	0.93	32.41	0.46	45.37	14.81	5.56	0.46	100.00
TOTALS	34	216								
WEIGHTED PERCENTAGES			0.93	32.41	0.46	45.37	14.81	5.56	0.46	100.00

TABLE 20

BRANCH RIVER ESCAPEMENT
AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group							
	3_2	4_2	4_3	5_2	5_3	6_3	6_4	Total
MALES:								
Number	4,448	32,147	1,480	38,092	5,937	4,944	--	87,048
Percent	5.11	36.93	1.70	43.76	6.82	5.68	--	100.00
FEMALES:								
Number	994	34,622	491	48,466	15,821	5,939	491	106,824
Percent	0.93	32.41	0.46	45.37	14.81	5.56	0.46	100.00
SEXES COMBINED:								
Number	5,442	66,769	1,971	86,558	21,758	10,883	491	193,872
Percent	2.81	34.44	1.02	44.65	11.22	5.61	0.25	100.00

TABLE 21

NAKNEK RIVER
FINAL RED SALMON DAILY ESCAPEMENT COUNTS
1966

DATE	DAILY COUNT	DAILY PERCENT OF TOTAL	ACCUM. COUNT
June 18	0	0.00	0
19	84	0.01	84
20	798	0.08	882
21	312	0.03	1,194
22	300	0.03	1,494
23	72	0.01	1,566
24	4,872	0.48	6,438
25	12,306	1.20	18,744
26	3,690	0.36	22,434
27	21,294	2.08	43,728
28	120,282	11.75	164,010
29	21.703	2,12	185,712
30	81.774	7,99	267,486
July 1	135,936	13.28	403,422
2	105,864	10.35	509,286
3	92,148	9.01	601,434
4	139,434	13.63	740,868
5	145,884	14.26	886,752
6	36,900	3.61	923,652
7	12,270	1.20	935,922
8	8,502	0.83	944,424
9	15,528	1.52	959,952
10	16,218	1.58	976,170
11	9,168	0.90	985,338
12	8,922	0.87	994,260
13	5,610	0.55	999,870
14	4,332	0.42	1,004,202
15	4,644	0.45	1,008,846
16	2,754	0.27	1,011,600
17	1,278	0.12	1,012,878
18	1,806	0.18	1,014,684
19	1,800	0.18	1,016,484
20	1,116	0.11	1,017,600
21	1,224	0.12	1,018,824
22	912	0.09	1,019.736
23	1,026	0.10	1,020,762
24	918	0.09	1,021,680
25	648	0.06	1,022,328
26	624	0.06	1,022,952
27	120	0.01	1,023,072
28	150	0.01	1,023,222
total	1,023,222	100.00	1,023,222

TABLE 22

NAKNEK RIVER ESCAPEMENT
SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. in Samples		Percent		Escapement	No. in Escapement	
		Males	Females	Males	Females		Males	Females
6/18-6/29	12	200	175	53.33	46.67	185,712	99,040	86,672
6/30-7/2	3	283	227	55.49	44.51	323,574	179,551	144,023
7/3-7/28	26	298	237	55.70	44.30	513,936	286,262	227,674
TOTALS	41	781	639	55.20	44.80	1,023,222	564,853	458,369

TABLE 23

NAKNEK RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 3_2	4_2	4_3	5_2	5_3	6_3	6_4	Total
						Percent				
6/18-6/29	12	200	0.50	26.50	2.00	12.00	41.00	18.00	--	100.00
6/30-7/2	3	283	0.35	27.92	2.47	14.49	38.16	16.61	--	100.00
7/3-7/28	26	298	1.01	28.19	4.03	13.76	42.61	9.73	0.67	100.00
TOTALS	41	639								
WEIGHTED PERCENTAGES			0.71	27.81	3.18	13.68	40.91	13.37	.034	100.00

TABLE 24

NAKNEK RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 4_2	4_3	5_2	5_3	6_2	6_3	6_4	7_4	Total
							Percent				
6/18-6/29	12	175	9.71	--	14.29	44.00	--	29.71	2.29	--	100.00
6/30-7/2	3	227	14.98	--	22.91	37.00	0.44	24.67	--	--	100.00
7/3-7/28	26	237	21.94	0.42	25.32	37.14	0.42	13.92	0.42	0.42	100.00
TOTALS	41	639									
WEIGHTED PERCENTAGES			17.44	.021	22.48	38.39	0.35	20.28	0.64	0.21	100.00

TABLE 25

NAKNEK RIVER ESCAPEMENT
AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group									
	3_2	4_2	4_3	5_2	5_3	6_2	6_3	6_4	7_4	Total
MALES:										
Number	4,014	157,074	17,952	77,292	231,100	--	75,503	1,198	--	564,853
Percent	0.71	27.81	3.18	13.68	40.91	--	13.37	0.34	--	100.00
FEMALES:										
Number	--	79,943	956	103,028	175,983	1,590	92,972	2,941	956	458,369
Percent	--	17.44	0.21	22.48	38.39	0.35	20.28	0.64	0.21	100.00
SEXES COMBINED:										
Number	4,014	237,017	18,908	180,320	407,083	1,590	168,475	4,859	956	1,023.222
Percent	0.39	23.16	1.85	17.62	39.79	0.16	16.47	0.47	0.09	100.00

Egegik District

The Egegik District commercial fishing boundaries remained as they were in 1967 and have not been changed since 1964.

The initial gill net gear registration, based on license sales, totaled 484 units for both drift and set nets. This represents a decrease of 28 units when compared to 1967.

The largest period catch of the 1968 commercial fishing season occurred during the 12 hour period of June 30th. The catch was 215,220 or 32% of the total season. The number of fishing units that were fished during the period was 394.

The total district sockeye run of 1,010,208 represented approximately one-half of the predicted return of 2,093,000 and was approximately one-half of the 16 year average. The district catch was 671,554 and represented 24% of the total Bay inshore catch. The escapement was 338,654.

The king salmon catch of 3,472 represented an increase over both the 1967 catch and 18 year average of 2,848. The chum salmon catch of 16,193 represented a 47% increase over the 1967 catch of 11,039 but fell far short of the 18 year average.

The coho catch was 6,507 and well exceeded both the 1967 catch of 1,044 and the 18 year average of 2,872.

FIGURE 3. 1968 EGEGIK COMMERCIAL FISHING DISTRICT.

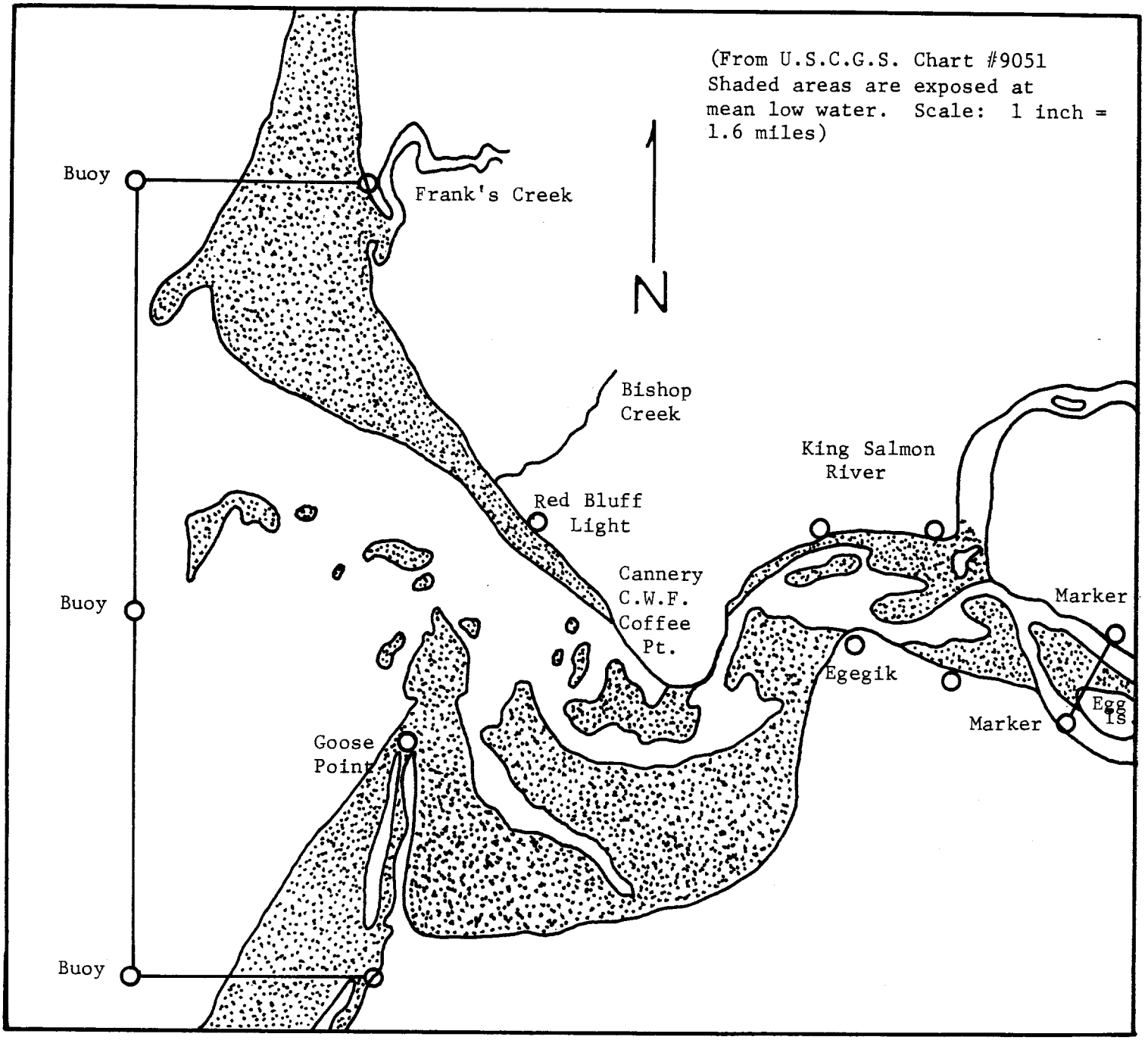

TABLE 26

EGEGIK DISTRICT, CATCH AND ESCAPEMENT OF SOCKEYE SALMON
BY SEX AND AGE GROUP, 1968

	Age Group										
	3_2	4_2	4_3	5_2	5_3	5_4	6_3	6_4	7_3	7_4	Total
CATCH											
Males:											
Number	--	49,382	578	21,932	154,369	--	63,779	8,249	--	2,556	300,845
Percent	--	16.41	0.19	7.29	51.32	--	21.20	2.74	--	0.85	100.00
Females:											
Number	49	37,256	--	45,986	122,199	--	156,979	4,660	49	3,531	370,709
Percent	0.01	10.05	--	12.40	32.97	--	42.35	1.26	0.01	0.95	100.00
Sexes Combined:											
Number	49	86,638	578	67,918	276,568	--	220,758	12,909	49	6,087	671,554
Percent	0.01	12.90	0.09	10.11	41.18	--	32.87	1.92	0.01	0.91	100.00
ESCAPEMENT											
Males:											
Number	--	8,761	3,920	8,143	84,152	952	42,102	5,571	--	1,539	155,140
Percent	--	5.65	2.53	5.25	54.24	0.61	27.14	3.59	--	0.99	100.00
Females:											
Number	--	11,004	953	18,292	94,606	--	52,070	5,532	--	1,057	183,514
Percent	--	6.00	0.52	9.97	51.55	--	28.37	3.01	--	0.58	100.00
Sexes Combined:											
Number	--	19,765	4,873	26,435	178,758	952	94,172	11,103	--	2,596	338,654
Percent	--	5.84	1.44	7.80	52.78	0.28	27.81	3.28	--	0.77	100.00
TOTAL RETURN											
Males:											
Number	--	58,143	4,498	30,075	238,521	952	105,881	13,820	--	4,095	455,985
Percent	--	12.75	0.99	6.60	52.30	0.21	23.22	3.03	--	0.90	100.00
Females:											
Number	49	48,260	953	64,278	216,805	--	209,049	10,192	49	4,588	554,223
Percent	0.01	8.71	0.17	11.60	39.12	--	37.71	1.84	0.01	0.83	100.00
Sexes Combined:											
Number	49	106,403	5,451	94,353	455,326	952	314,930	24,012	49	8,683	1,010,208
Percent	0.00	10.53	0.54	9.34	45.08	0.09	31.18	2.38	0.00	0.86	100.00

TABLE 27

EGEGIK COMMERCIAL CATCH
SEX COMPOSITION OF SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. In Samples		Percent		Catch	No. In Catch	
		Males	Females	Males	Females		Males	Females
Thru-6/23	7	397	339	53.94	46.06	36,705	19,799	16,906
6/24-6/26	5	258	259	49.90	50.10	82,904	41,369	41,535
6/27-6/29	5	219	279	43.98	56.02	150,721	66,287	84,434
6/30-7/3	5	197	299	39.72	60.28	215,220	85,485	129,735
7/4-	7	345	385	47.26	52.74	186,004	87,905	98,099
TOTAL	29	1,416	1,561	44.80	55.20	671,554	300,845	370,709

TABLE 28

EGEGIK COMMERCIAL CATCH
AGE COMPOSITION OF MALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group 4_2	4_3	5_2	5_3	6_3	6_4	7_4	Total
						Percent				
Thru-6/23	7	397	23.93	--	7.81	49.61	17.13	0.76	0.76	100.00
6/24-6/26	5	258	15.50	0.78	5.81	60.08	16.28	1.16	0.39	100.00
6/27-6/29	5	219	22.37	--	5.48	51.60	19.18	1.37	--	100.00
6/30-7/3	5	197	7.11	--	39.07	53.80	27.92	4.57	2.03	100.00
7/4-	7	345	19.71	0.29	11.88	44.93	19.42	3.19	0.58	100.00
TOTALS	29	1,416								
WEIGHTED PERCENTAGES			16.41	0.19	7.29	51.32	21.20	2.74	0.85	100.00

TABLE 29

EGEGIK COMMERCIAL CATCH
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group Percent								Total
			3_2	4_2	5_2	5_3	6_3	6_4	7_3	7_4	
Thru-6/23	7	339	0.29	9.14	12.98	33.33	41.91	1.18	0.29	0.88	100.00
6/24-6/26	5	259	--	8.49	13.90	40.54	35.14	1.16	--	0.77	100.00
6/27-6/29	5	279	--	15.41	12.19	32.62	39.06	0.36	--	0.36	100.00
6/30-7/3	5	299	--	5.35	10.37	27.76	54.51	0.67	--	1.34	100.00
7/4-	7	385	--	12.47	14.55	36.87	32.21	2.86	--	1.04	100.00
TOTALS	29	1,561									
WEIGHTED PERCENTAGES			0.01	10.05	12.40	32.97	42.35	1.26	0.01	0.95	100.00

TABLE 30

EGEGIK RIVER
FINAL RED SALMON DAILY ESCAPEMENT COUNTS, 1968

DATE	DAILY COUNTS	DAILY PERCENT OF TOTAL	ACCUM. COUNTS
6/20	0	0.00	0
21	0	0.00	0
22	0	0.00	0
23	48	0.01	48
24	72	0.02	120
25	324	0.10	444
26	60	0.02	504
27	8	0.00	512
28	1,416	0.42	1,928
29	13,038	3.85	14,966
30	10,680	3.15	25,646
7/ 1	17,076	5.04	42.722
2	33,378	9.86	76,100
3	36,846	10.88	112,946
4	34,626	10.23	147,572
5	36,762	10.86	184,334
6	47,886	14.14	232,220
7	12,942	3.82	245,162
8	24,024	7.09	269,186
9	34,482	10.18	303,668
10	7,560	2.23	311,228
11	6,558	1.94	317,786
12	5,436	1.61	323,222
13	4,344	1.28	327,566
14	456	0.13	328,022
15	1,206	0.36	329,228
16	570	0.17	329,798
17	2,340	0.69	332,138
18	582	0.17	332,720
19	2,190	0.65	334.910
20	1,122	0.33	336,032
21	450	0.13	336,482
22	474	0.14	336,956
23	690	0.20	337,646
24	684	0.20	338,330
25	270	0.08	338,600
26	54	0.02	338,654
TOTAL	338,654	100.00	338,654

TABLE 31

EGEGIK RIVER ESCAPEMENT
SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. In Samples		Percent		Escapement	No. In Escapement	
		Males	Females	Males	Females		Males	Females
6/20-7/5	16	145	169	46.18	53.82	184,334	85,125	99,209
7/5-7/26	21	147	177	45.37	54.63	154,320	70,015	84,305
TOTALS	37	292	346	45.81	54.19	338,654	155,140	183,514

TABLE 32

EGEGIK RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group								
			4_2	4_3	5_2	5_3	5_4	6_3	6_4	7_4	Total
			Percent								
6/20-7/5	16	145	4.14	0.69	6.21	52.41	--	33.79	2.07	0.69	100.00
7/5-7/26	21	147	7.48	4.76	4.08	56.47	1.36	19.05	5.44	1.36	100.00
TOTALS	37	292									
WEIGHTED PERCENTAGES			5.65	2.53	5.25	54.24	0.61	27.14	3.59	0.99	100.00

TABLE 33

EGEGIK RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 4_2	4_3	5_2	5_3	6_3	6_4	7_4	Total
							Percent			
6/20-7/5	16	169	5.33	--	11.24	47.34	31.36	4.14	0.59	100.00
7/6-7/26	21	177	6.78	1.13	8.47	56.51	24.86	1.69	0.56	100.00
TOTALS	37	346								
WEIGHTED PERCENTAGES			6.00	0.52	9.97	51.55	28.37	3.01	0.58	100.00

Ugashik District

The commercial fishing boundaries remained the same as they were in 1967, with the southernmost point being Cape Menshikof and the northernmost point at Cape Greig.

The total gill net registration for 1968 was 151, down 18 units from 1967.

The largest sockeye catch of the season occurred during the 24 hour period of July 7-8. The period catch was 22,078 or 27% of the total season catch. The catch was harvested by 89 units of fishing gear. The total catch for the 1968 season was 82,457. With an escapement of 70,896, the season's total inshore run was 153,353. Both the catch and escapement compare poorly with the 18 year average.

The king salmon catch was 2,153. This catch represented an increase over the 1967 landings but fell short of the 18 year average by 89 fish. The chum catch of 17,624 also exceeded the 1967 catch but fell short of the 18 year average. The coho catch of 5,771 was the second largest catch of the last 18 years. The largest was the 1951 catch of 35,683.

FIGURE 4. 1968 UGASHIK COMMERCIAL FISHING DISTRICT.

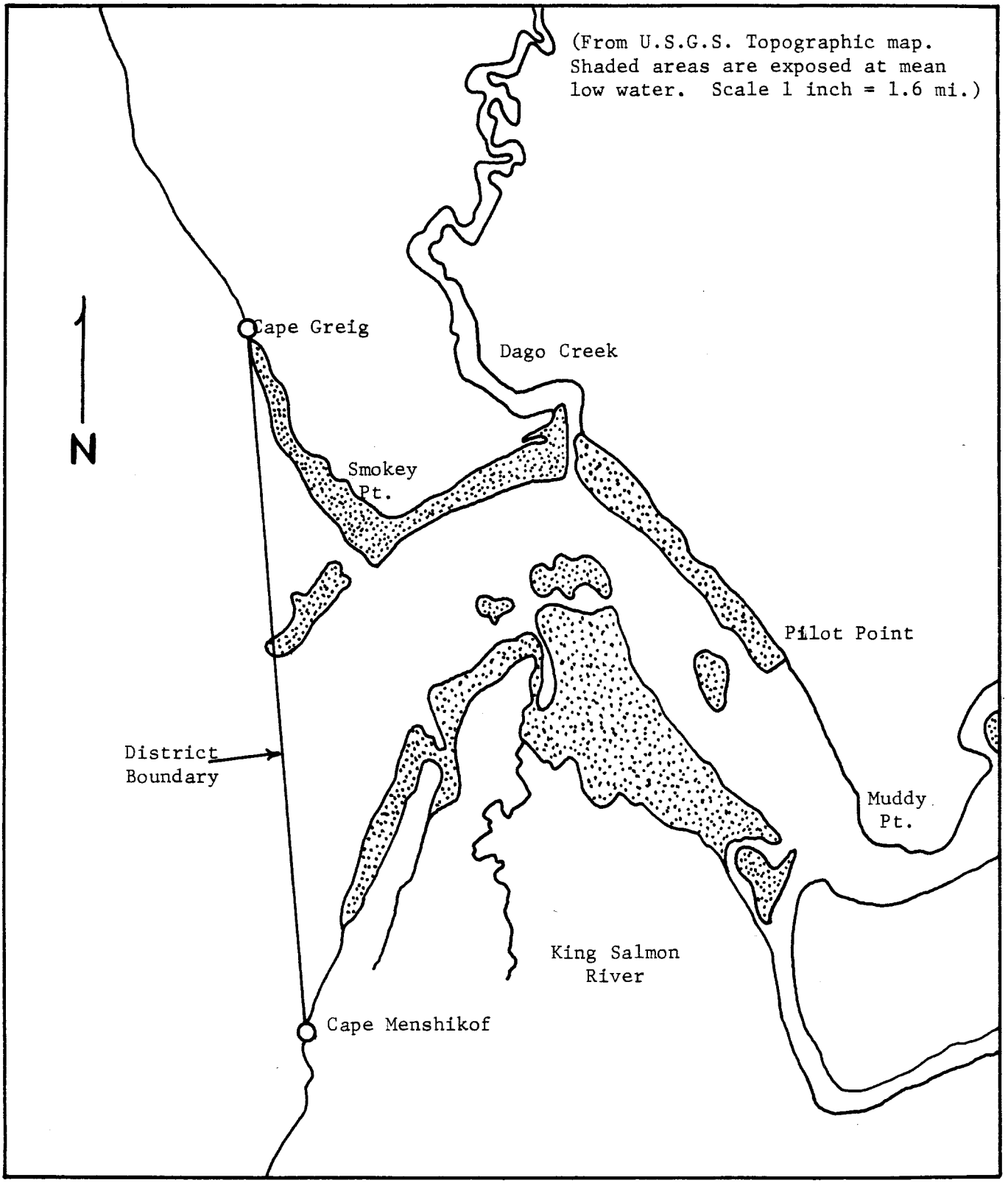

TABLE 34

UGASHIK DISTRICT, CATCH AND ESCAPEMENT OF SOCKEYE SALMON
BY SEX AND AGE GROUP, 1968

	Age Group											
	3_2	4_1	4_2	4_3	5_2	5_3	6_2	6_3	6_4	7_3	7_4	Total
CATCH												
Males:												
Number	--	68	8,232	--	3,780	25,839	--	4,331	45	--	--	42,295
Percent	--	0.16	19.46	--	8.94	61.09	--	10.24	0.11	--	--	100.00
Females:												
Number	23	92	5,296	89	6,457	18,209	44	9,609	158	81	104	40,162
Percent	0.06	0.23	13.19	0.22	16.08	45.34	0.11	23.92	0.39	0.20	0.26	100.00
Sexes Combined:												
Number	23	160	13,528	89	10,237	44,048	44	13,940	203	81	104	82,457
Percent	0.03	0.19	16.41	0.11	12.41	53.42	0.05	16.90	0.25	0.10	0.13	100.00
ESCAPEMENT												
Males:												
Number	--	--	8,357	2,478	3,405	14,859	--	4,024	--	--	--	33,123
Percent	--	--	25.23	7.48	10.28	44.86	--	12.15	--	--	--	100.00
Females:												
Number	--	--	4,646	6,191	3,717	18,267	--	4,952	--	--	--	37,773
Percent	--	--	12.30	16.39	9.84	48.36	--	13.11	--	--	--	100.00
Sexes Combined												
Number	--	--	13,003	8,669	7,122	33,126	--	8,976	--	--	--	70,896
Percent	--	--	18.34	12.23	10.05	46.72	--	12.66	--	--	--	100.00
TOTAL RETURN												
Males:												
Number	--	68	16,589	2,478	7,185	40,698	--	8,355	45	--	--	75,418
Percent	--	0.09	22.00	3.28	9.53	53.96	--	11.08	0.06	--	--	100.00
Females:												
Number	23	92	9,942	6,280	10,174	36,476	44	14,561	158	81	104	77,935
Percent	0.03	0.12	12.76	8.06	13.05	46.81	0.06	18.68	0.20	0.10	0.13	100.00
Sexes Combined:												
Number	23	160	26,531	8,758	17,359	77,174	44	22,916	203	81	104	153,353
Percent	0.01	0.12	17.30	5.71	11.32	50.32	0.03	14.94	0.13	0.05	0.07	100.00

TABLE 35

UGASHIK COMMERCIAL CATCH
SEX COMPOSITION OF SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. in Samples			Percent		Commercial Catch	No. in Catch	
		Males	Females	Total	Males	Females		Males	Females
Thru-6/29	4	412	354	766	53.79	46.21	17,665	9,502	8,163
6/30-7/6	2	315	301	616	51.14	48.86	27,592	14,111	13,481
7/7-	2	230	228	458	50.22	49.78	37,200	18,682	18,518
TOTALS	8	957	883	1,840	51.29	48.71	82,457	42,495	40,162

TABLE 36

UGASHIK COMMERCIAL CATCH
AGE COMPOSITION OF MALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group 4_1	4_2	5_2	5_3	6_3	6_4	Total
					Percent				
Thru-6/29	4	412	0.24	27.43	6.07	57.28	8.98	--	100.00
6/30-7/6	2	315	0.32	23.17	8.89	62.22	5.08	0.32	100.00
7/7-	2	230	--	12.61	10.43	62.18	14.78	--	100.00
TOTALS	8	957							
WEIGHTED PERCENTAGES			0.16	19.46	8.94	61.09	10.24	0.11	100.00

TABLE 37

UGASHIK COMMERCIAL CATCH
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	3_2	4_1	4_2	4_3	5_2	5_3	6_2	6_3	6_4	7_3	7_4	Totals
Thru-6/29	4	354	0.28	1.13	18.36	--	17.80	35.60	--	26.27	0.28	--	0.28	100.00
6/30-7/6	2	301	--	--	11.30	0.66	13.62	47.84	0.33	25.25	1.00	--	--	100.00
7/7-	2	228	--	--	12.28	--	17.11	47.80	--	21.93	--	0.44	0.44	100.00
TOTALS	8	883												
WEIGHTED PERCENTAGES			0.06	0.23	13.19	0.22	16.08	45.34	0.11	23.92	0.39	0.20	0.26	100.00

TABLE 38

UGASHIK RIVER
FINAL RED SALMON DAILY SOCKEYE ESCAPEMENT, 1968

DATE	DAILY COUNTS	DAILY PERCENT	ACCUM. COUNTS
6/28	54	0.08	54
29	48	0.07	102
30	36	0.05	138
7/ 1	42	0.06	180
2	36	0.05	216
3	1,110	1.56	1,326
4	8,166	11.52	9,492
5	918	1.29	10,410
6	2,496	3.52	12,906
7	5,478	7.73	18,384
8	6,036	8.51	24,420
9	8,886	12.53	33,306
10	5,880	8.29	39,186
11	4,074	5.75	43,260
12	3,396	4.79	46,656
13	1,812	2.56	48,468
14	1,932	2.72	50,400
15	1,602	2.26	52,002
16	1,266	1.78	53,268
17	6,576	9.28	59,844
18	2,766	3.90	62,610
19	1,572	2.22	64,182
20	1,272	1.79	65,454
21	978	1.38	66,432
22	624	0.88	67,056
23	480	0.68	67,536
24	276	0.39	67,812
25	366	0.52	68,178
26	264	0.37	68,442
27	312	0.44	68,754
28	342	0.48	69,096
29	474	0.67	69,570
30	558	0.79	70,128
31	282	0.40	70,410
8/ 1	132	0.19	70,542
2	144	0.20	70,686
3	96	0.14	70,782
4	114	0.16	70,896
TOTAL	70,896	100.00	70,896

TABLE 39

UGASHIK RIVER ESCAPEMENT
SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. in Samples		Percent		Escapement	No. In Escapement	
		Males	Females	Males	Females		Males	Females
6/28-8/4	38	107	122	46.72	53.28	70,896	33,123	37,773
TOTAL	38	107	122	46.72	53.28	70,896	33,123	37,773

TABLE 40

UGASHIK RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group					
			4_2	4_3	5_2	5_3	6_3	Total
			Percent					
6/28-8/4	38	107	25.23	7.48	10.28	44.86	12.15	100.00
TOTALS	38	107						
WEIGHED PERCENTAGES			25.23	7.48	10.28	44.86	12.15	100.00

TABLE 41

UGASHIK RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group					
			4_2	4_3	5_2	5_3	6_3	Total
			Percent					
6/28-8/4	38	122	12.30	16.39	9.84	48.36	13.11	100.00
TOTALS	38	122						
WEIGHED PERCENTAGES			12.30	16.39	9.84	48.36	13.11	100.00

Nushagak District

The Nushagak fishing district boundaries remained unchanged from 1967, and no boundary changes were instituted during the season. The Igushik section was again opened to fishing after a regulatory closure in 1967 due to a small expected run. The Nushagak and Igushik sections were managed separately, resulting in nearly optimum escapements in both sections. The Snake River section remained closed, as it has been since 1961, to protect the weak run to that system.

Pre-season set and drift gillnet registration was 811 units, 39 more than 1967. Of the registrants, 84% were residents and 16% non-residents.

The maximum combined set and drift gillnet effort applied to the sockeye fishery was 566 units of gear, about 70% of the registered total. This peak effort occurred during a 12-hour fishing period on June 30, resulting in a catch of 266,614 sockeyes which was 35.6% of the season total Nushagak district catch. This catch cannot be related to effort as in other years since the net restrictions imposed by the State Board of Fish and Game limited the amount of gear to 75 fathoms of drift and 25 fathoms of set net in all districts, and this restriction was in effect on June 30 and throughout most of the sockeye season.

The total inshore run to the Nushagak district consisted of 1,725,945 sockeyes with an escapement of 976,664 and a catch of 749,281. The total district escapement was 84% of the 18 year average of 1,161,862. The total catch was 81% of the 18 year average catch of 924,818. This inshore run was thus well below average and also considerably less than the forecasted district run of 3,298,000. After apportioning the catch to the individual

systems the inshore run breakdown was: Wood River, 1,055,961; Igushik, 439,396; Snake, 4,100; Nuyakuk, 167,753; and Nushagak-Mulchatna, 58,735. Weakness of the Wood River return accounted for most of the difference between forecasted and actual run.

The king salmon catch of 78,201 was 22% higher than the 18 year average of 63,942, and seventh highest for that period.

The total chum catch of 178,786 was only 82% of the average catch of 218,843.

The pink salmon catch showed considerable numbers on July 15 when 4-3/4" mesh was permitted. The peak effort was applied on July 20 with 571 boats and 144 set nets. Even with this effort, the restricted gear could not handle the fish available for catch, so the gear restriction was removed late in the season. The total catch of 1,705,150 second highest of all peak (even-year) catches.

The coho catch expanded in 1968 due to a Japanese market for cured fish. In the past the coho catch has been largely dependent on effort The catch of 48,867 was the largest catch since 1958, and 74% greater than the 18 year average.

Counting towers were maintained on the Wood, Igushik, Nuyakuk, and Nushagak Rivers. Escapement on the Snake River was estimated from aerial surveys with age classes assigned as 1963-1965 sampling indicated. Catches were sampled at the canneries at Ekuk and in Dillingham, with special samples taken on Igushik beach fish from the Igushik section and on Flounder Flats set net catches.

Escapement to the Nushagak system escapements were found by subtracting the Nuyakuk river escapement by age class from that of the main Nushagak, leaving estimated numbers by age class for the Nushagak-Mulchatna.

Catch was apportioned to Nushagak-Igushik systems in a multi-step process in two principal parts. First, Igushik-section-only fish were treated with Igushik beach sampling to separate Igushik fish. The remainder were called Nushagak section fish. Second, the fish taken when both Nushagak and Igushik were open were treated with Igushik and Nushagak escapements to estimate fish from each section. After this all Igushik fish were added together. All Nushagak section fish were added together and apportioned to rivers in the Nushagak section based on numbers in each escapement by age class and sex. The method is described more fully in the 1967 Catch and Informational Leaflet number 121 by Mike McCurdy.

FIGURE 5. 1968 NUSHAGAK COMMERCIAL FISHING DISTRICT.

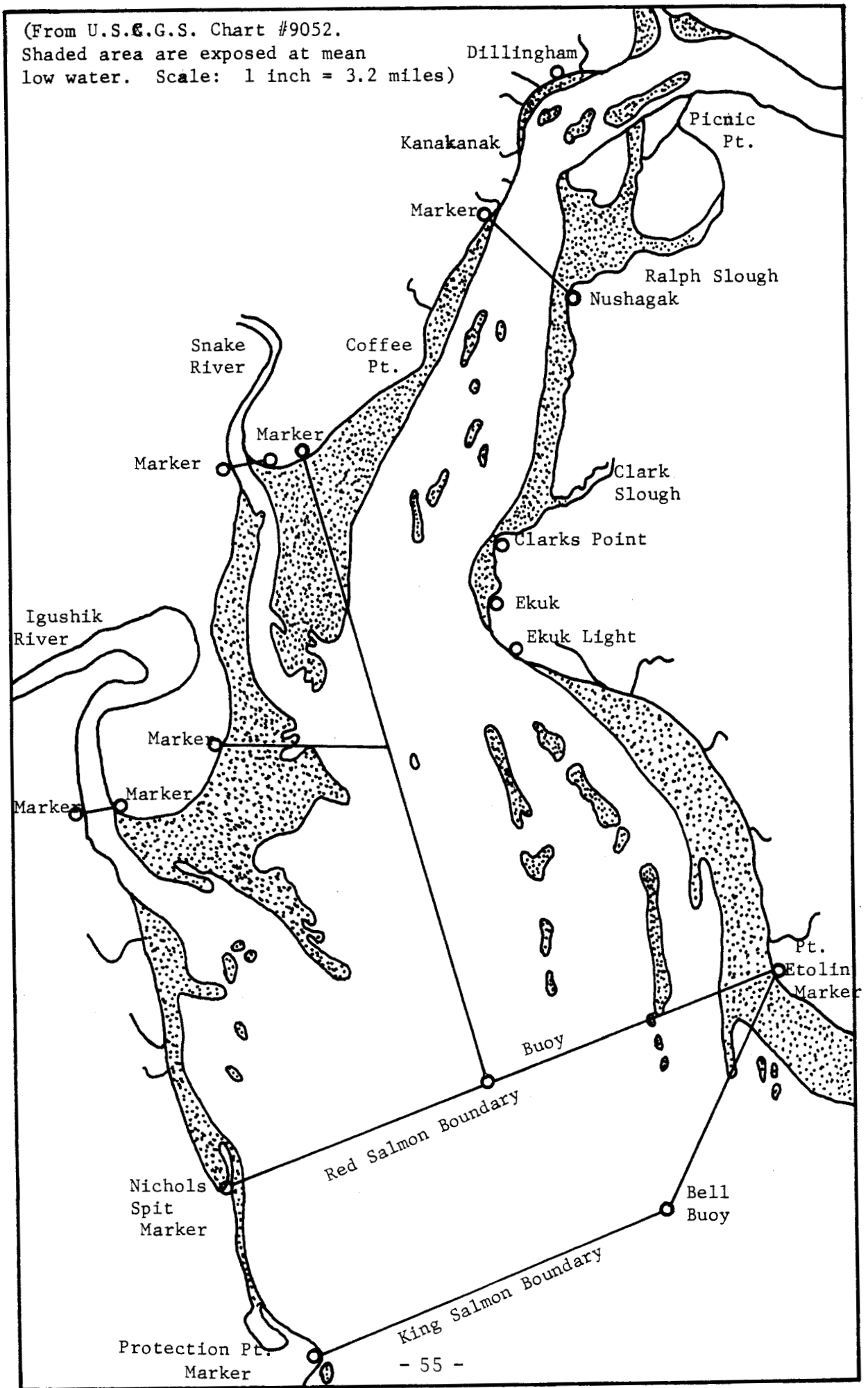

TABLE 42

NUSHAGAK-IGUSHIK DISTRICT, CATCH AND ESCAPEMENT
BY AGE GROUP, SOCKEYE SALMON, 1968

System	Age Group 3_1	3_2	4_1	4_2	4_3	5_1	5_2	5_3	5_4	6_2	6_3	7_3	7_4	Total
							Percent							
WOOD RIVER														
Escapement	1,332	886	2,234	256,841	426	-	335,670	32,795	-	3,940	14,775	445	-	649,344
Catch	286	-	2,707	99,029	-	-	258,023	27,760	-	692	17,583	-	537	406,617
Subtotal	1,618	886	4,941	355,870	426	-	593,693	60,555	-	4,632	32,358	445	537	1,055,961
Percent	0.15	0.08	0.47	33.70	0.04	-	56.22	5.74	-	0.44	3.07	0.04	0.05	100.00
IGUSHIK RIVER														
Escapement	-	83	296	92,354	94	-	82,846	15,511	-	155	3,169	-	-	194,508
Catch	-	-	413	72,148	-	-	145,397	18,167	-	22	8,374	-	167	244,888
Subtotal	-	83	709	164,502	94	-	228,243	33,678	-	377	11,543	-	167	439,396
Percent	-	0.02	0.16	37.44	0.02	-	51.94	7.67	-	0.08	2.63	-	0.04	100.00
SNAKE RIVER														
Escapement	-	-	-	1,655	-	-	2,136	211	-	-	98	-	-	4,100
Catch	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	1,655	-	-	2,136	211	-	-	98	-	-	4,100
Percent	-	-	-	40.36	-	-	52.10	5.15	-	-	2.39	-	-	100.00
NUYAKUK RIVER														
Escapement	96	-	353	9,462	-	-	84,869	1,070	86	172	534	-	-	96,642
Catch	62	-	427	3,652	-	-	65,316	901	-	8	667	-	78	71,111
Subtotal	158	-	780	13,114	-	-	150,185	1,971	86	180	1,201	-	78	167,753
Percent	0.09	-	0.46	7.82	-	-	89.53	1.17	0.05	0.11	0.72	-	0.05	100.00
NUSHAGAK-MULCHATNA RIVER														
Escapement	726	-	5,085	2,387	-	208	23,042	-	-	622	-	-	-	32,070
Catch	401	-	6,168	930	-	926	17,920	-	-	320	-	-	-	26,665
Subtotal	1,127	-	11,253	3,317	-	1,134	40,962	-	-	942	-	-	-	58,735
Percent	1.92	-	19.16	5.65	-	1.93	69.74	-	-	1.60	-	-	-	100.00
TOTAL NUSHAGAK-IGUSHIK DISTRICT														
Escapement	2,154	969	7,968	362,699	520	208	528,563	49,587	86	4,889	18,576	445	0	976,664
Catch	749	-	9,715	175,759	-	926	486,656	46,828	-	1,242	26,624	-	782	749,281
Total	2,903	969	17,683	538,458	520	1,134	1,015,219	96,415	86	6,131	45,200	445	782	1,725,945
Percent	0.17	0.06	1.02	31.20	0.03	0.07	58.82	5.59	0.00	0.35	2.62	0.02	0.05	100.00

TABLE 43

NUSHAGAK COMMERCIAL CATCH
SEX COMPOSITION OF SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. In Samples		Percent		Commercial Catch	No. In Catch	
		Males	Females	Males	Females		Males	Females
-6/27	13	269	336	44.72	55.28	114,175	51,063	63,112
6/28-7/3	7	377	343	53.65	46.35	237,825	127,605	110,220
7/4-	5	245	262	48.58	51.42	152,393	74,039	78,354
Total	25	891	941	50.10	49.90	504,393	252,707	251,686

TABLE 44

NUSHAGAK COMMERCIAL CATCH
AGE COMPOSITION OF MALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group Percent									
			3_1	4_1	4_2	5_1	5_2	5_3	6_2	6_3	7_4	Total
5/17-6/27	13	269	-	0.37	29.74	-	62.09	3.34	-	4.09	0.37	100.00
6/28-7/3	7	377	-	1.59	19.90	0.26	72.16	3.71	0.53	1.59	0.26	100.00
7/4-	5	245	0.82	1.22	31.02	0.41	47.76	12.65	-	6.12	-	100.00
TOTALS	25	891										
WEIGHTED PERCENTAGES			0.23	1.26	24.84	0.25	63.49	6.12	0.28	3.32	0.21	100.00

TABLE 45

NUSHAGAK COMMERCIAL CATCH
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group 4_1	4_2	5_2	5_3	6_3	Total
					Percent			
5/17-6/27	13	336	0.60	9.23	78.56	4.17	7.44	100.00
6/28-7/3	7	343	1.75	13.99	76.68	4.96	2.62	100.00
7/4 -	5	262	2.29	37.02	47.72	9.92	3.05	100.00
TOTALS	25	941						
WEIGHTED PERCENTAGES			1.64	19.59	68.69	6.22	3.86	100.00

TABLE 46

NUSHAGAK APPORTIONED COMMERCIAL CATCH, AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group									
	3_1	4_1	4_2	5_1	5_2	5_3	6_2	6_3	7_4	Total
MALES:										
Number	749	4,109	53,181	832	169,630	14,428	863	8,375	540	252,707
Percent	0.30	1.63	21.04	0.33	67.13	5.71	0.34	3.31	0.21	100.00
FEMALES:										
Number	-	5,193	50,430	94	171,629	14,233	157	9,875	75	251,686
Percent	-	2.06	20.04	0.04	68.19	5.66	0.06	3.92	0.03	100.00
SEXES COMBINED:										
Number	749	9,302	103,611	926	341,259	28,661	1,020	18,250	615	504,393
Percent	0.15	1.85	20.54	0.18	67.66	5.68	0.20	3.62	0.12	100.00

TABLE 47

IGUSHIK CATCH AND ESCAPEMENT OF SOCKEYE SALMON
BY SEX AND AGE GROUP, 1968

	Age Group									
	3_2	4_1	4_2	4_3	5_2	5_3	6_2	6_3	7_4	Total
CATCH										
Males:										
Number	-	154	43,003	-	60,766	8,324	71	4,238	148	116,704
Percent	-	0.13	36.85	-	52.07	7.13	0.06	3.63	0.13	100.00
Females:										
Number	-	259	29,145	-	84,631	9,843	151	4,136	19	128,184
Percent	-	0.20	22.74	-	66.03	7.67	0.12	3.23	0.01	100.00
Sexes combined:										
Number	-	413	72,148	-	145,397	18,167	222	8,374	167	244,888
Percent	-	0.17	29.46	-	59.37	7.42	0.09	3.42	0.07	100.00
ESCAPEMENT										
Males:										
Number	83	-	55,835	94	31,138	6,848	155	1,883	-	96,036
Percent	0.09	-	58.14	0.10	32.42	7.13	0.16	1.96	-	100.00
Females:										
Number	-	296	36,519	-	51,708	8,663	-	1,286	-	98,472
Percent	-	0.30	37.09	-	52.51	8.80	-	1.30	-	100.00
Sexes combined:										
Number	83	296	92,354	94	82,846	15,511	155	3,169	-	194,508
Percent	0.04	0.15	47.48	0.05	42.60	7.97	0.08	1.63	-	100.00
TOTAL RETURN										
Males:										
Number	83	154	98,838	94	91,904	15,172	226	6,121	148	212,740
Percent	0.04	0.07	46.46	0.04	43.20	7.13	0.11	2.88	0.07	100.00
Females:										
Number	-	555	65,664	-	136,339	18,506	151	5,422	19	226,656
Percent	-	0.25	28.97	-	60.15	8.16	0.07	2.39	0.01	100.00
Sexes combined:										
Number	83	709	164,502	94	228,243	33,678	377	11,543	167	439,396
Percent	0.02	0.16	37.44	0.02	51.94	7.66	0.09	2.63	0.04	100.00

TABLE 48

IGUSHIK COMMERCIAL CATCH, SEX COMPOSITION OF
SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples[1/]	No. in Samples[1/]		Percent		Catch	No. in Catch	
		Males	Females	Males	Females		Males	Females
6/21-6/29	4	195	200	48.99	51.01	137,725	67,473	70,252
6/30-	3	192	226	45.94	54.06	107,163	49,231	57,932
TOTALS	7	387	426	47.66	52.34	244,888	116,704	128,184

1/ Igushik beach samples used in apportionment; other figures are apportioned figures and differ somewhat from samples because of inclusion of apportioned Igushik district fish.

TABLE 49

IGUSHIK COMMERCIAL CATCH
AGE COMPOSITION OF MALE SOCKEYE SALMON FISHING PERIOD, 1968[1/]

Period	Samples	No. of Fish	Age Group 4_1	4_2	5_2	5_3	6_2	6_3	7_4	Total
			Percent							
6/21-6/29	4	195	0.14	39.51	47.92	8.63	0.10	3.48	0.22	100.00
6/30-	3	192	0.12	33.20	57.76	5.08	-	3.84	-	100.00
TOTALS	7	387								
WEIGHTED PERCENTAGES			0.13	36.85	52.07	7.13	0.06	3.63	0.13	100.00

TABLE 50

IGUSHIK COMMERCIAL CATCH
AGE COMPOSITION OF FEMALE SOCKEYE SALMON FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group 4_1	4_2	5_2	5_3	6_2	6_3	7_4	Total
			Percent							
6/21-6/29	4	200	0.37	23.46	60.79	11.38	0.13	3.87	-	100.00
6/30-	3	226	0.00	21.86	72.37	3.19	0.10	2.45	0.03	100.00
TOTALS	7	426								
WEIGHTED PERCENTAGES			0.20	22.74	66.03	7.67	0.12	3.23	0.01	100.00

TABLE 51

IGUSHIK RIVER
FINAL RED SALMON DAILY ESCAPEMENT COUNTS
-1968-

Date	Daily Count	Daily % Of Total	Accum. Counts
6/21	0	0.00	0
22	192	0.09	192
23	0	0.00	192
24	912	0.46	1,104
25	2,010	1.03	3,114
26	8,052	4.14	11,166
27	11,904	6.12	23,070
28	22,416	11.53	45,486
29	19,836	10.20	65,322
30	16,362	8.41	81,684
7/1	22,170	11.40	103,854
2	16,632	8.55	120,486
3	16,362	8.42	136,848
4	12,258	6.30	149,106
5	6,414	3.30	155,520
6	5,988	3.08	161,508
7	6,360	3.27	167,868
8	5,928	3.05	173,796
9	3,660	1.88	177,456
10	4,626	2.38	182,082
11	- 180	-0.09	181,902
12	2,004	1.03	183,906
13	2,940	1.52	186,846
14	1,092	0.56	187,938
15	- 54	-0.03	187,884
16	846	0.44	188,730
17	348	0.18	189,078
18	-1,104	-0.57	187,974
19	162	0.08	188,136
20	1,698	0.87	189,834
21	1,530	0.79	191,364
22	- 396	-0.20	190,968
23	1,506	0.77	192,474
24	1,716	0.88	194,190
25	318	0.16	194,508
TOTAL:	194,508	100.00	194,508

TABLE 52

IGUSHIK RIVER ESCAPEMENT
SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. in Samples		Percent		Escapement	No. in Escapement	
		Males	Females	Males	Females		Males	Females
6/21-29	7	222	241	47.95	52.05	65,322	31,322	34,000
6/30-7/2	3	196	160	55.06	44.94	55,164	30,373	24,791
7/3-5	3	195	176	52.56	47.44	35,034	18,414	16,620
7/6-25	20	192	278	40.85	59.15	38,988	15,927	23,061
TOTALS	33	805	855	49.37	50.63	194,508	96,036	98,472

TABLE 53

IGUSHIK RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 3_2	4_2	4_3	5_2	5_3	6_2	6_3	Total
						Percent				
6/21-29	7	222	--	50.00	--	42.34	5.41	--	2.25	100.00
6/30-7/2	3	196	--	58.68	--	34.18	3.06	0.51	3.57	100.00
7/3-5	3	195	--	64.62	0.51	27.18	7.18	--	0.51	100.00
7/6-25	20	192	0.52	65.62	--	15.63	18.23	--	--	100.00
TOTALS	33	805								
WEIGHTED PERCENTAGES			0.09	58.14	0.10	32.42	7.13	0.16	1.96	100.00

TABLE 54

IGUSHIK RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 4_1	4_2	5_2	5_3	6_3	Total
			Percent					
6/21-29	7	241	0.41	25.31	67.65	4.56	2.07	100.00
6/30-7/2	3	160	0.63	35.63	56.86	5.63	1.25	100.00
7/3-5	3	176	--	36.93	53.98	7.95	1.14	100.00
7/6-25	20	278	--	56.12	24.46	19.06	0.36	100.00
TOTALS	33	855						
WEIGHTED PERCENTAGES			0.30	37.09	52.51	8.80	1.30	100.00

TABLE 55

NUSHAGAK - IGUSHIK APPORTIONED SOCKEYE SALMON
COMMERCIAL CATCH BY AGE CLASS, SEXES COMBINED

	Age Class										
	3_1	3_2	4_1	4_2	5_1	5_2	5_3	6_2	6_3	7_4	Total
NUSHAGAK SECTION											
Number	749	-	9,302	103,611	926	341,259	28,661	1,020	18,250	615	504,393
Percent	0.15	-	1.85	20.54	0.18	67.66	5.68	0.20	3.62	0.12	100.00
IGUSHIK SECTION											
Number	-	-	413	72,148	-	145,397	18,167	222	8,374	167	244,888
Percent	-	-	0.17	29.46	-	59.37	7.42	0.09	3.42	0.07	100.00
TOTAL DISTRICT											
Number	749	-	9,715	175,759	926	486,656	46,828	1,242	26,624	782	749,281
Percent	0.10	-	1.30	23.46	0.12	64.95	6.25	0.17	3.55	0.10	100.00

TABLE 56

WOOD RIVER
FINAL RED SALMON DAILY ESCAPEMENT COUNTS
1968

Date	Daily Count	Daily % Of Total	Accum. Counts
6/21	0	0.00	0
22	402	0.06	402
23	48	0.01	450
24	6,144	0.94	6,594
25	14,064	2.16	20,658
26	2,640	0.40	23,298
27	2,508	0.38	25,806
28	42,126	6.50	67,932
29	21,138	3.25	89,070
30	8,856	1.36	97,926
7/ 1	26,934	4.15	124,860
2	22,596	3.48	147,456
3	49,164	7.57	196,620
4	47,058	7.25	243,678
5	75,294	11.60	318,972
6	87,960	13.55	406,932
7	41,496	6.40	448,428
8	51,648	7.96	500,076
9	62,796	9.68	562,872
10	29,442	4.53	592,314
11	11,406	1.75	603,720
12	9,942	1.53	613,662
13	9,000	1.38	622,662
14	8,034	1.24	630,696
15	5,700	0.88	636,396
16	7,476	1.15	643,872
17	3,036	0.47	646,908
18	978	0.15	647,886
19	690	0.10	648,576
20	288	0.04	648,864
21	324	0.05	649,188
22	126	0.02	649,314
23	30	0.01	649,344
TOTAL	649,344	100.00	649,344

TABLE 57

WOOD RIVER ESCAPEMENT, SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968.

Date	No. of Samples	No. in Samples		Percent		Escapement	No. in Escapement	
		Males	Females	Males	Females		Males	Females
6/21-7/3	13	220	246	47.21	52.79	196,620	92,824	103,796
7/4-7/5	2	156	159	49.52	50.48	122,352	60,589	61,763
7/6-7/23	18	341	399	46.08	53.92	330,372	152,235	178,137
TOTALS	33	717	804	47.07	52.93	649,344	305,648	343,696

TABLE 58

WOOD RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No, of Fish	Age Group 3_1	3_2	4_1	4_2	5_2	5_3	6_2	6_3	Total
						Percent					
6/21-7/3	13	220	--	--	--	37.27	52.73	6.82	--	3.18	100.00
7/4-7/5	2	156	--	--	--	41.03	49.99	5.77	--	3.21	100.00
7/6-7/23	18	341	.29	.29	.59	44.87	46.62	4.11	.59	2.64	100.00
TOTALS	33	717									
WEIGHTED PERCENTAGES			0.14	0.14	0.29	41.81	49.15	5.26	0.29	2.92	100.00

TABLE 59

WOOD RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group Percent										
			3_1	3_2	4_1	4_2	4_3	5_2	5_3	6_2	6_3	7_3	Total
6/21-7/3	13	246	--	--	--	36.99	.41	57.31	3.25	.41	1.63	--	100.00
7/4-7/5	2	159	--	--	--	33.33	--	62.27	.63	.63	3.14	--	100.00
7/6-7/23	18	399	.50	.25	.75	39.35	--	49.13	7.27	1.25	1.25	.25	100.00
TOTALS	33	804											
WEIGHTED PERCENTAGES			0.26	0.13	0.39	37.56	0.12	53.97	4.86	0.88	1.70	0.13	100.00

TABLE 60

WOOD RIVER ESCAPEMENT
AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group										
	3_1	3_2	4_1	4_2	4_3	5_2	5_3	6_2	6_3	7_3	Total
MALES:											
Number	441	441	898	127,764	-	150,206	16,083	898	8,917	-	305,648
Percent	0.14	0.14	0.29	41.81	-	49.15	5.26	0.29	2.92	-	100.00
FEMALES:											
Number	891	445	1,336	129,077	426	185,464	16,712	3,042	5,858	445	343,696
Percent	0.26	0.13	0.39	37.56	0.12	53.97	4.86	0.88	1.70	0.13	100.00
SEXES COMBINED:											
Number	1,332	886	2,234	256,841	426	335,670	32,795	3,940	14,775	445	649,344
Percent	0.20	0.14	0.34	39.55	0.06	51.70	5.05	0.61	2.28	0.07	100.00

TABLE 61

NUYAKUK RIVER
FINAL RED SALMON DAILY ESCAPEMENT COUNTS
1968

Date	Daily Counts	Daily % Of Total	Accum. Counts
6/29	30	0.03	30
30	624	0.65	654
7/ 1	456	0.47	1,110
2	1,326	1.37	2,436
3	3,192	3.30	5,628
4	5,196	5.38	10,824
5	4,176	4.32	15,000
6	5,778	5.98	20,778
7	5,004	5.18	25,782
8	7,062	7.31	32,844
9	12,126	12.55	44,970
10	15,162	15.69	60,132
11	11,070	11.46	71,202
12	6,990	7.23	78,192
13	4,704	4.87	82,896
14	2,838	2.94	85,734
15	3,462	3.58	89,196
16	3,180	3.29	92,376
17	1,788	1.85	94,164
18	816	0.85	94,980
19	528	0.55	95,508
20	192	0.20	95,700
21	174	0.18	95,874
22	264	0.26	96,138
23	168	0.17	96,306
24	78	0.08	96,384
25	72	0.07	96,456
26	60	0.06	96,516
27	60	0.06	96,576
28	48	0.05	96,624
29	18	0.02	96,642
30	0	0.00	96,642
TOTAL	96,642	100.00	96,642

TABLE 62

NUYAKUK RIVER ESCAPEMENT
SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. in Samples		Percent		Escapement	No. in Escapement	
		Males	Females	Males	Females		Males	Females
6/29-7/9	11	226	240	48.50	41.40	44,970	21,810	23,160
7/10-7/30	21	264	340	43.71	56.29	51,672	22,586	29,086
TOTALS	32	490	580	45.94	54.06	96,642	44,396	52,246

TABLE 63

NUYAKUK RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group (Percent)						Total
			3_1	4_2	5_2	5_3	5_4	6_3	
6/29-7/9	11	226	0.44	11.50	87.18	--	--	0.88	100.00
7/10-7/30	21	264	--	10.98	86.37	1.89	0.38	0.38	100.00
TOTALS	33	490							
WEIGHTED PERCENTAGES			0.22	11.24	86.76	0.96	0.38	0.63	100.00

TABLE 64

NUYAKUK RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group (Percent)						Total
			4_1	4_2	5_2	5_3	6_2	6_3	
6/29-7/9	11	240	0.42	10.83	87.08	1.67	--	--	100.00
7/10-7/30	21	340	0.88	6.76	90.01	0.88	0.59	0.88	100.00
TOTALS	33	580							
WEIGHTED PERCENTAGES			0.68	8.56	88.71	1.23	0.33	0.49	100.00

TABLE 65

NUYAKUK RIVER ESCAPEMENT
AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group								
	3_1	4_1	4_2	5_2	5_3	5_4	6_2	6_3	Total
MALES:									
Number	96	--	4,988	38,521	427	86	--	278	44,396
Percent	0.22	--	11.24	86.76	0.96	0.19	--	0.63	100.00
FEMALES:									
Number	--	353	4,474	46,348	643	--	172	256	52,246
Percent	--	0.68	8.56	88.71	1.23	--	0.33	0.49	100.00
SEXES COMBINED:									
Number	96	353	9,462	84,869	1,070	86	172	534	96,642
Percent	0.10	0.36	9.79	87.82	1.11	0.09	0.18	0.55	100.00

TABLE 66

NUSHAGAK-MULCHATNA RIVER ESCAPEMENT
SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. in Samples Males	Females	Percent Males	Females	Escapement	No. in Escapement Males	Females
6/26-7/26	31	166	144	53.72	46.28	32,070	17,173	14,897
TOTALS	31	166	144	53.72	46.28	32,070	17,173	14,897

TABLE 67

NUSHAGAK-MULCHATNA RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 3_1	4_1	4_2	5_1	5_2 Percent	6_2	Total
6/26-7/26	31	166	3.61	14.46	9.04	1.20	68.68	3.01	100.00
TOTALS	31	166							
WEIGHTED PERCENTAGES			3.61	14.46	9.04	1.20	68.68	3.01	100.00

TABLE 68

NUSHAGAK-MULCHATNA RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No, of Fish	Age Group 3_1	4_1	4_2	5_2 Percent	6_2	Total
6/26-7/26	31	144	0.70	17.48	5.59	75.53	0.70	100.00
TOTALS	31	144						
WEIGHTED PERCENTAGES			0.70	17.48	5.59	75.53	0.70	100.00

TABLE 69

NUSHAGAK-MULCHATNA RIVER ESCAPEMENT, AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968.

	AGE GROUP						
	3_1	4_1	4_2	5_1	5_2	6_2	Total
MALES:							
Number	620	2,483	1,552	206	11,795	517	17,173
Percent	3.61	14.46	9.04	1.20	68.68	3.01	100.00
FEMALES:							
Number	104	2,604	833	--	11,252	104	14,897
Percent	0.70	17.48	5.59	--	75.53	0.70	100.00
SEXES COMBINED:							
Number	724	5,087	2,385	206	23,047	621	32,070
Percent	2.26	15.86	7.44	0.64	71.86	1.94	100.00

Togiak District

The 1968 Togiak district fishing boundaries remained the same as the 1967 boundaries with the following exceptions - The lines describing the Ugalikthluk and Nunavarchak sections were not in effect.

Total gill net registration for the district toal 111 of which 100 were drift nets. The total of 111 exceeds the 1967 registation by 11 units.

The fishing periods remained the same as in 1967 with the Togiak and Kulukak sections having four (4) fishing days per week and the Osviak and Matogak sections having five (5) fishing days per week. The Cape Pierce section was open (7) days per week beginning June 5. The Togiak section had a seven day closure extending from July 10 to July 17.

The peak of the sockeye salmon district catch of 21,748 occurred during the period of July 1 through 6. This period catch represented 30% of the total season's catch. Between June 24 and July 13, 360 hours of fishing time produced 71% of the season's sockeye catch. As was the case in 1967 the run timing was in advance of the normal for Togiak.

The total inshore run was composed of a commercial catch of 72,699 and a district escapement of 56,418. The total district inshore run of 129,117 fell far short of the predicted district inshore run of 257,000. Both the catch and escapement fell below the averages for the district.

The Togiak district king salmon catch of 13,499 exceeded 1967's record catch of 13,381. The chum salmon catch of 108,001 nearly doubled 1967's catch and exceeded the 15 year average by 19,000 fish. A new record catch of 24,872 coho salmon was recorded for 1968. This catch exceeded last year's catch by more than 6,000 fish.

FIGURE 6. 1968 TOGIAK COMMERCIAL FISHING DISTRICT.

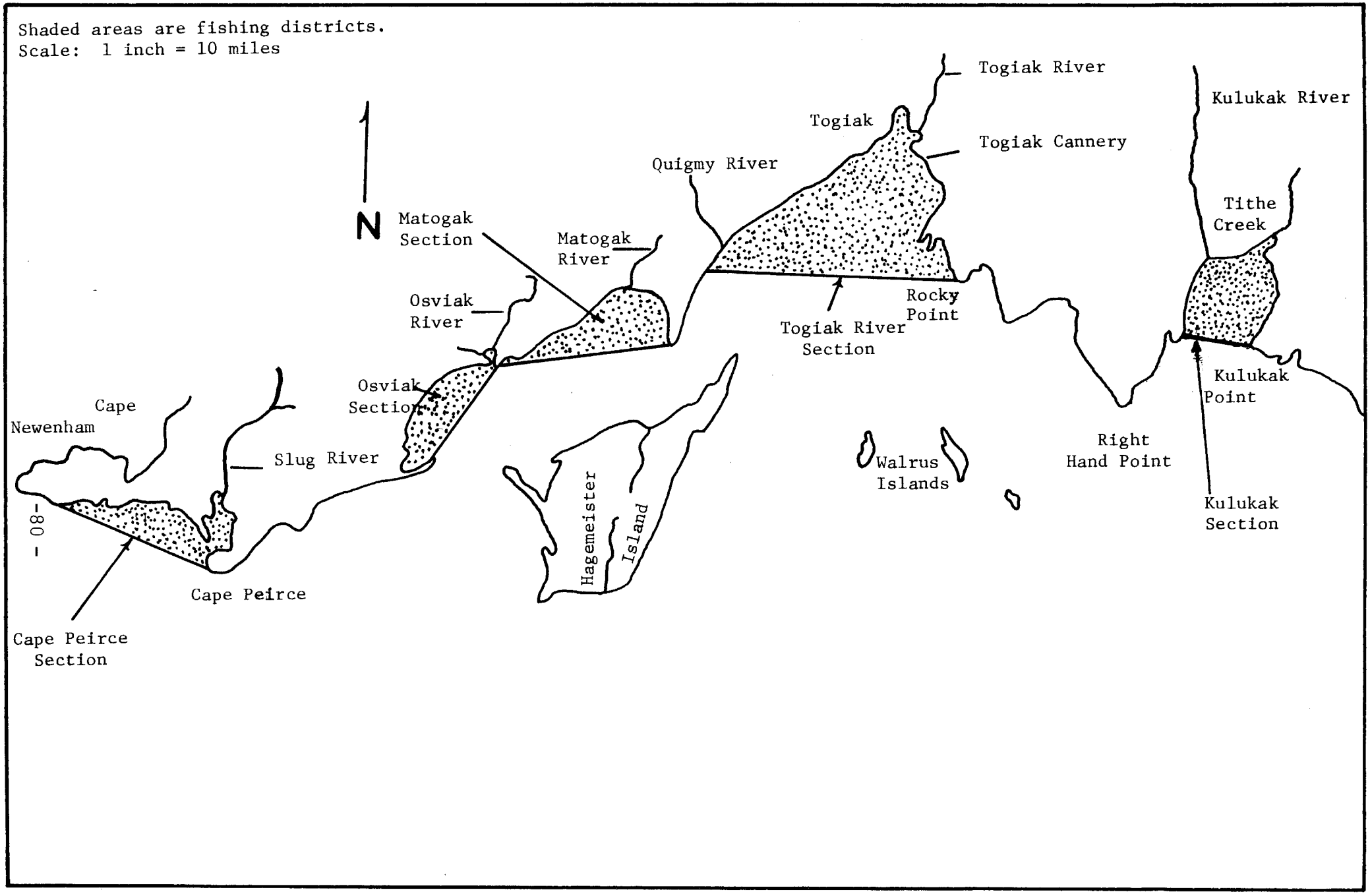

TABLE 70

TOGIAK DISTRICT CATCH AND ESCAPEMENT
AGE COMPOSITION OF SOCKEYE SALMON, 1968

	Age Class									
	3_1	3_2	4_1	4_2	5_2	5_3	6_2	6_3	7_4	Total
COMMERCIAL CATCH:										
Number	34	--	786	14,730	37,325	14,013	110	5,667	34	72,699
Percent	0.05	--	1.08	20.26	51.34	19.27	0.15	7.80	0.05	100.00
ESCAPEMENT:										
Number	125	90	264	26,069	24,357	3,507	--	2,006	--	56,418
Percent	0.22	0.16	0.47	46.20	43.17	6.22	--	3.56	--	100.00
TOTAL DISTRICT:										
Number	159	90	1,050	40,799	61,682	17,520	110	7,673	34	129,117
Percent	0.12	0.07	0.81	31.60	47.78	13.57	0.08	5.94	0.03	100.00

TABLE 71

TOGIAK COMMERCIAL CATCH
SEX COMPOSITION OF SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Sample	No. of Samples		Percent		Commercial Catch	No. in Catch	
		Males	Females	Males	Females		Males	Females
Thru-7/7	7	179	290	38.17	61.83	41,364	15,789	25,575
7/8-7/14	7	201	314	39.03	60.97	11,704	4,569	7,135
7/15-	8	199	377	34.55	65.45	19,631	6,782	12,849
TOTALS	22	579	981	37.33	62.67	72,699	27,140	45,559

TABLE 72

TOGIAK COMMERCIAL CATCH
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 3_1	4_1	4_2	5_2	5_3	6_3	7_4	Total
						Percent				
-7/7	7	179	--	1.12	24.58	55.87	10.61	7.82	0.00	100.00
7/8-7/14	7	201	--	1.00	32.34	35.32	15.92	15.42	0.00	100.00
7/15-	8	199	0.50	0.50	18.59	17.59	57.80	4.52	0.50	100.00
TOTALS	22	579								
WEIGHTED PERCENTAGES			0.12	0.95	24.40	42.85	23.29	8.27	0.12	100.00

TABLE 73

TOGIAK COMMERCIAL CATCH
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 4_1	4_2	5_2	5_3	6_2	6_3	Total
						Percent			
-7/7	7	290	2.07	14.83	72.76	4.48	0.34	5.52	100.00
7/8-7/14	7	314	0.00	25.16	54.46	9.55	0.32	10.51	100.00
7/15-	8	377	0.00	19.63	24.93	45.63	0.00	9.81	100.00
TOTALS	22	981							
WEIGHTED PERCENTAGES			1.16	17.80	56.41	16.88	0.24	7.51	100.00

TABLE 74

TOGIAK COMMERCIAL CATCH
AGE COMPOSITION OF SOCKEYE SALMON, 1968

	Age Group (Percent)								
	3_1	4_1	4_2	5_2	5_3	6_2	6_3	7_4	Total
MALES:									
Number	34	257	6,620	11,628	6,322	-	2,245	34	27,140
Percent	0.12	0.95	24.40	42.85	23.29	-	8.27	0.12	100.00
FEMALES:									
Number	-	529	8,110	25,697	7,691	110	3,422	-	45,559
Percent	-	1.16	17.80	56.41	16.88	0.24	7.51	-	100.00
SEXES COMBINED:									
Number	34	786	14,730	37,325	14,013	110	5,667	34	72,699
Percent	0.05	1.08	20.26	51.34	19.27	0.15	7.80	0.05	100.00

TABLE 75

TOGIAK RIVER
FINAL DAILY RED SALMON ESCAPEMENT COUNTS, 1968

DATE	DAILY COUNTS	DAILY PERCENT OF TOTAL	ACCUM. COUNT
July 2	258	0.60	258
3	804	1.87	1,062
4	1,980	4.61	3,042
5	1,344	3.13	4,386
6	1,518	3.54	5,904
7	1,758	4.10	7,662
8	2,028	4.73	9,690
9	1,710	3.98	11,400
10	1,158	2.70	12,588
11	1,620	3.77	14,178
12	3,654	8.51	17,832
13	1,416	3.30	19,248
14	3,006	7.00	22,254
15	1,386	3.23	23,640
16	1,854	4.32	25,494
17	2,028	4.72	27,522
18	1,602	3.73	29,124
19	1,074	2.50	30,198
20	498	1.16	30,696
21	774	1.80	31,470
22	822	1.92	32,292
23	228	0.53	32,520
24	1,020	2.38	33,540
25	1,080	2.52	34.620
26	360	0.84	34,980
27	876	2.04	35,856
28	360	0.84	36,216
29	540	1.26	36,756
30	444	1.03	37,200
31	354	0.82	37,554
Aug. 1	720	1.68	38,274
2	702	1.64	38,976
3	342	0.80	39,318
4	372	0.87	39,690
5	522	1.22	40,212
6	180	0.42	40,392
7	312	0.73	40,704
8	492	1.15	41.196
9	108	0.25	41,304
10	594	1.38	41,898

(Continued)

TABLE 75 (Continued)

TOGIAK RIVER DAILY SOCKEYE SALMON ESCAPEMENT, 1968

Date	Daily Counts	Daily Percent of Total	Accum. Count
8/11	486	1.13	42,384
12	162	0.38	42,546
13	156	0.36	42,702
14	120	0.28	42,822
15	72	0.17	42,894
16	24	0.06	42,918
TOTAL	42,918	100.00	42,918

TABLE 76

TOGIAK RIVER ESCAPEMENT, SEX COMPOSITION OF SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. in Samples		Percent			No. in Escapement	
		Males	Females	Males	Females	Escapement	Males	Females
7/2-7/16	15	233	180	56.42	43.58	25,494	14,384	11,110
7/17-8/16	31	274	229	54.47	45.53	17,424	9,491	7,933
TOTAL	46	507	409	55.63	44.37	42,918	23,875	19,043

TABLE 77

TOGIAK RIVER ESCAPEMENT
AGE COMPOSITION OF MALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group							
			3_1	3_2	4_1	4_2	5_2	5_3	6_3	
			Percent							
7/2-7/16	15	233	0.43	--	--	40.77	49.36	5.58	3.86	100.00
7/17-8/16	31	274	0.36	0.73	1.46	52.20	37.59	5.11	2.55	100.00
TOTALS	46	507								
WEIGHTED PERCENTAGES			0.40	0.29	0.58	45.31	44.69	5.39	3.34	100.00

TABLE 78

TOGIAK RIVER ESCAPEMENT
AGE COMPOSITION OF FEMALE SOCKEYE SALMON BY DATE, 1968

Date	No. of Samples	No. of Fish	Age Group 4_1	4_2	5_2	5_3	6_3	Total
				Percent				
7/2-7/16	15	180	0.55	37.78	51.11	5.56	5.00	100.00
7/17-8/16	31	229	--	60.70	27.51	9.61	2.18	100.00
TOTALS	46	409						
WEIGHTED PERCENTAGES			0.32	47.32	41.28	7.25	3.83	100.00

TABLE 79

TOGIAK RIVER ESCAPEMENT
AGE COMPOSITION OF SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group							
	3_1	3_2	4_1	4_2	5_2	5_3	6_3	Total
MALES								
Number	96	69	139	10,818	10,668	1,288	797	23,875
Percent	0.40	0.29	0.58	45.31	44.68	5.39	3.34	100.00
FEMALES								
Number	--	--	61	9,012	7,861	1,380	729	19,043
Percent	--	--	0.32	47.32	41.28	7.25	3.83	100.00
SEXES COMBINED								
Number	96	69	200	19,830	18,529	2,668	1,526	42,918
Percent	0.22	0.16	0.47	46.20	43.17	6.22	3.56	100.00

TABLE 80

TOGIAK TRIBUTARIES, KULUKAK SYSTEM AND TOTAL TOGIAK DISTRICT
SOCKEYE SALMON ESCAPEMENT BY AGE GROUP, 1968

	Age Group							
	3_1	3_2	4_1	4_2	5_2	5_3	6_3	Total
TOGIAK TRIBUTARIES 1/	15	11	33	3,235	3,022	435	249	7,000 2/
KULUKAK SYSTEM 1/	14	10	31	3,004	2,806	404	231	6,500 2/
TOGIAK RIVER	96	69	200	19,830	18,529	2,668	1,526	42,918
TOTAL TOGIAK DISTRICT								
Number	125	90	264	26,069	24,357	3,507	2,006	56,418
Percent	0.22	0.16	0.47	46.20	43.17	6.22	3.56	100.00

1/ Age composition (sexes combined) of Togiak River escapement used for these systems.

2/ Aerial survey estimate.

NORTH SIDE ALASKA PENINSULA FISHING DISTRICT

As in the past the red salmon fishery was concentrated between Nelson Lagoon and the Three Hills.

The timing of the Bear and Sandy River runs was normal in 1968. As of July 13 the Bear River escapement was only 32,000 compared to an average of 54,000 in prior years. Consequently the waters between Cape Kutuzof and Port Moller were closed on July 13 and reopened two days per week from July 23 through August 13. On July 30 the closed area was expanded to include approximately 10 miles along the beach. This large closed area resulted in heavier than normal effort and catches in the Three Hills area to the east.

These area and fishing period closures resulted in attaining a fair escapement of 143,000 in Bear River. Catches in the Bear River area (315) totaled only 90,500. The Three Hills area (316) produced 79,000 red salmon. Many of these undoubtedly were Bear River fish. Thus the total catch of areas 315 and 316 was 177,000 red salmon. The 10 year average catch for these areas approximates 320,000 fish.

The Sandy River, only five miles east of Bear River, contributes to the Bear River fishery. The escapement in this early system totaled only 3,200 red salmon as determined by aerial survey. The salmon runs in this river are highly variable with past escapements ranging from 5,000 to over 100,000.

The Nelson Lagoon catch was 51,000 compared to a 10 year average of 79,000. The escapement of 28,000 was below the desired range 40-50,000.

Southwest of Nelson Lagoon the season's red run totaled 16,000 catch and 21,000 escapement.

The Ilnik area escapements were about average of 11,800 red salmon. The areas to the northeast, 317 and 318, showed no red salmon catches and average escapement of 17,000 red salmon.

FIGURE 7. MAP OF IMPORTANT RED SALMON STATISTICAL AREAS ON NORTH SIDE OF ALASKA PENINSULA, 1968.

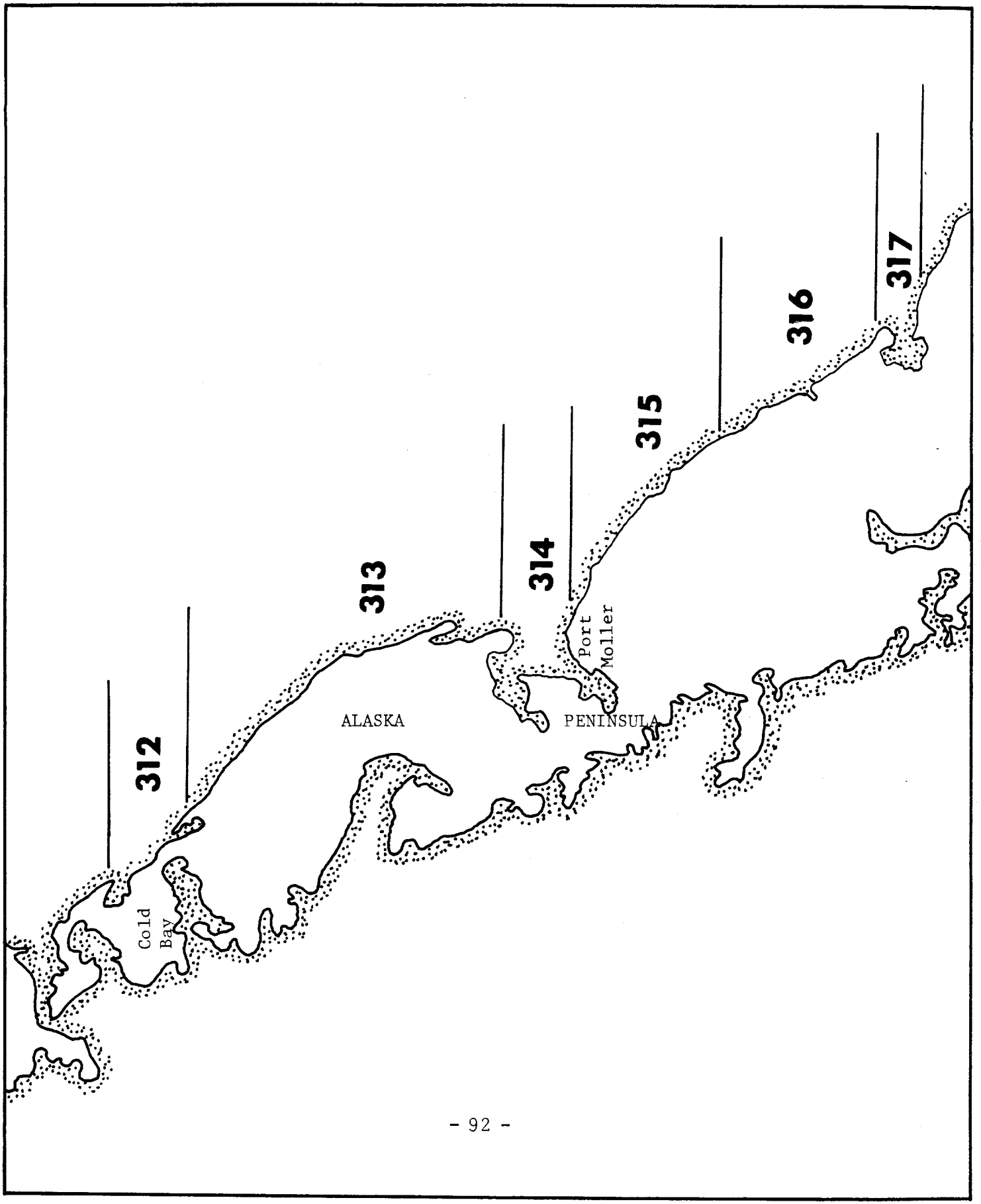

TABLE 81

BEAR RIVER
FINAL DAILY RED SALMON ESCAPEMENT COUNTS, 1968

Date	Daily Counts	Daily % Of Total	Cumulative Total
6/20	60	0.04	60
21	392	0.27	452
22	154	0.11	606
23	233	0.16	839
24	123	0.09	962
25	1	0.00	963
26	20	0.01	983
27	6	0.01	989
28	157	0.11	1,146
29	5,897	4.12	7,043
30	944	0.66	7,987
7/ 1	4,051	2.83	12,038
2	2,667	1.86	14,705
3	4,471	3.13	19,176
4	3,016	2.11	22,192
5	1,780	1.24	23,972
6	1,444	1.01	25,416
7	700	0.49	26,116
8	607	0.42	26,723
9	381	0.27	27,104
10	687	0.48	27,791
11	1,269	0.89	29,060
12	1,359	0.95	30,419
13	1,437	1.01	31,856
14	1,014	0.71	32,870
15	1,047	0.73	33,917
16	2,136	1.49	36,053
17	963	0.67	37,016
18	2,790	1.95	39,806
19	3,282	2.29	43,088
20	3,321	2.32	46,409
21	3,164	2.21	49,573
22	2,088	1.46	51,661
23	2,068	1.45	53,729
24	1,155	0.82	54,884
25	834	0.58	55,718
26	2,135	1.49	57,853
27	1,047	0.73	58,900
28	3,327	2.33	62,227
29	813	0.57	63,040
30	99	0.07	63,139
31	96	0.07	63,235

Continued ...

TABLE 81

BEAR RIVER
FINAL DAILY RED SALMON ESCAPEMENT COUNTS, 1968
(Continued)

Date	Daily Counts	Daily % of Total	Cumulative Total
8/ 1	1,491	1.04	64,726
2	1,314	0.92	66,040
3	1,581	1.11	67,621
4	8,716	6.09	76,337
5	3,409	2.38	79,746
6	2,727	1.91	82,473
7	318	0.22	82,791
8	1,455	1.02	84,246
9	2,493	1.74	86,739
10	3,079	2.15	89,818
11	10,183	7.12	100,001
12	13,340	9.34	113,341
13	3,774	2.64	117,115
14	2,274	1.59	119,389
15	2,000	1.40	121,389
16	1,632	1.14	123,021
17	681	0.48	123,702
18	408	0.28	124,110
19	2,004	1.40	126,114
20	2,417	1.69	128,531
21	1,695	1.18	130,226
22	2,382	1.66	132,608
23	2,865	2.00	135,473
24	1,917	1.34	137,390
25	1,266	0.88	138,656
26	1,497	1.05	140,153
27	1,393	0.97	141,546
28	480	0.34	142,026
29	327	0.23	142,353
30	566	0.40	142,919
31	120	0.08	143,039
TOTAL	143,039	100.00	143,039

TABLE 82

NELSON RIVER
FINAL DAILY RED SALMON ESCAPEMENT COUNTS, 1969

Date	Daily Total	Daily % of Total		Cumulative Total	
6/29	120	0.49	(0.42)[1/]	120	(120)[1/]
30	- 195	-0.80	(-0.68)	- 75	(- 75)
7/ 1	1,168	4.82	(4.81)	1,093	(1,093)
2	1,287	5.30	(4.52)	2,380	(2,380)
3	815	3.36	(2.86)	3,195	(3,195)
4	524	2.16	(1.84)	3,719	(3,719)
5	6	0.02	(0.02)	3,725	(3,725)
6	261	1.08	(0.92)	3,986	(3,986)
7	171	0.70	(0.60)	4,157	(4,157)
8	746	3.08	(2.62)	4,903	(4,903)
9	417	1.72	(1.46)	5,320	(5,320)
10	843	3.48	(2.96)	6,163	(6,163)
11	1,022	4.22	(3.59)	7,185	(7,185)
12	733(4,965)[1/]	3.02	(17.45)	7,918	(12,150)
13	110	0.45	(0.39)	8,028	(12,260)
14	42	0.17	(0.15)	8,070	(12,302)
15	81	0.33	(0.28)	8,151	(12,383)
16	497	2.05	(1.75)	8,648	(12,880)
17	410	1.69	(1.44)	9,058	(13,290)
18	930	3.84	(3.27)	9,988	(14,220)
19	543	2.24	(1.91)	10,531	(14,763)
20	293	1.21	(1.03)	10,824	(15,056)
21	174	0.72	(0.61)	10,998	(15,230)
22	71	0.29	(0.25)	11,069	(15,301)
23	243	1.00	(0.84)	11,312	(15,544)
24	81	0.33	(0.28)	11,393	(15,625)
25	81	0.33	(0.28)	11,474	(15,706)
26	99	0.41	(0.35)	11,573	(15,805)
27	899	3.70	(3.16)	12,472	(16,704)
28	843	3.47	(2.47)	13,315	(17,547)
29	522	2.15	(1.83)	13,837	(18,069)
30	306	1.26	(1.07)	14,143	(18,375)
31	49	0.20	(0.17)	14,192	(18,424)

Continued ...

TABLE 82

NELSON RIVER
FINAL DAILY RED SALMON ESCAPEMENT COUNTS, 1969
(Continued)

Date	Daily Total	Daily % of Total	Cumulative Total	
8/1	106	0.44 (0.37)[1/]	14,298	(18,530)[1/]
2	180	0.74 (0.63)	14,478	(18,710)
3	261	1.08 (0.92)	14,739	(18,971)
4	935	3.85 (3.28)	15,674	(19,906)
5	6,486(3,105 n.c.)[2/]	26.75 (22.79)	22,160	(26,392)
6	1,210	4.98 (4.25)	23,370	(27,602)
7	385	1.59 (1.35)	23,755	(27,987)
8	72	0.30 (0.25)	23,827	(28,059)
9	36	0.15 (0.13)	23,863	(28,095)
10	27	0.11 (0.09)	23,890	(28,122)
11	25	0.10 (0.09)	23,915	(28,147)
12	15	0.06 (0.05)	23,930	(28,162)
13	98	0.40 (0.40)	24,028	(28,260)
14	15	0.06 (0.05)	24,043	(28,275)
15	66	0.27 (0.23)	24,109	(28,341)
16	18	0.07 (0.06)	24,127	(28,359)
17	12	0.05 (0.04)	24,139	(28,371)
18	36	0.15 (0.13)	24,175	(28,407)
19	44	0.18 (0.15)	24,219	(28,451)
20	0	0.00 (0.00)	24,219	(28,451)
21	0	0.00 (0.00)	24,219	(28,451)
22	42	0.17 (0.15)	24,261	(28,493)
23	No counts		24,261	(28,493)
24	No counts		24,261	(28,493)
25	-9	- 0.04 (-0.03)	24,252	(28,484)
26	0	0.00 (0.00)	24,252	(28,484)
27	-12	- 0.05 (-0.04)	24,240	(28,484)
28	0	0.00 (0.00)	24,240	(28,472)
Total:	24,240(28,472)[1/]	100.00 (100.00)[1/]	24,240	28,472

[1/] Figures take into consideration aerial count adjustment, all figures in this category are enclosed in parentheses.

[2/] Night Count.

TABLE 83

NORTH SIDE ALASKA PENINSULA
ESTIMATES OF RED SALMON ESCAPEMENT BASED ON AERIAL SURVEYS, 1968

Statistical Area & Stream No.	Stream Name	Location	Survey Date	Season Total Red Salmon Escapement
311-20.12	Pogromni R.	W. end Unimak Is.	7/19	--
311-30.06	Divide Creek	Urilia Bay	7/19	100
311-30.07	Whaleback Mtn. Creek	Urilia Bay	8/18	5,000
311-30.08	Christianson Lagoon	Urilia Bay	7/19	1,000
311-30.09	Mudhole	Urilia Bay	7/19	150
311-30.10	Clear Lagoon	Urilia Bay	7/19	--
311-40.1	Emil's River	N. side Unimak Is.		
311-50.2	Swanson Lagoon	N. side Unimak Is.	8/23	2,000
		Total North Unimak Escapement		8,250
312-20.6	Blue-Bill Lake	Izembek Bay	8/30	500
-20.13	Outer Marker	" "	8/30	250
-40.1	Moffet Bay River	" "	8/30	8,150
-40.3	Moffet Point Stream	" "	8/30	600
		Total Izembek Bay Red Salmon Escapement		9,500
313-10.02	--	Gerstle Bay	8/29	1,000
-10.05	Cathedral River	Gerstle Bay	8/29	--
-10.06	--	Cape Leontovich	7/10	--
-10.11	--	Black Hills	7/31	300
-10.14	Steelhead Creek	Black Hills	8/22	100
30.1	David's River	W. of Nelson River	7/10	1,100
30.2	Caribou River	W. of Nelson River	7/10	1,000
30.3	Nelson (Sapsuk) R.	Nelson Lagoon (See tower data)		28,470
		Total area 313 Red Salmon Escapement		31,970
314-20.6	Grass Valley	Herendeen Bay	8/12	400
		Total area 314 Red Salmon Escapement		400
315-11.2	Bear River	N. Port Moller (See tower data)		143,039
315-12.0	Sandy River	N. Port Moller	8/23	3,200
		Total area 315 Red Salmon Escapement		146,240
316-10.5	Ocean River	Near Ilnik	8/23	600
20.1	Ilnik	Ilnik	8/23	11,200
		Total area 316 Red Salmon Escapement		11,800
317.7	Meshik River	Port Heiden	8/12	13,050
		Total area 317 Red Salmon Escapement		13,050
318-20.6	Cinder River	False Ugashik	8/13	4,100
		Total area 318 Red Salmon Escapement		4,100
		Total North Side Alaska Peninsula Red Salmon Escapement		225,310

TABLE 84

NORTH SIDE ALASKA PENINSULA AND SOUTH UNIMAK FISHERY
SOCKEYE SALMON CATCH BY WEEK, BY STATISTICAL AREA, 1968

Area of catch	Week of catch 1/	Sockeye salmon catch 2/	Accumulative catch
284-South Unimak 3/	June 2-8	156	156
	June 9-15	65,758	65,914
	June 16-22	198,481	264,395
	June 23-29	51,309	315,704
	June 30-July 6	8,984	324,688
	July 7-13	2,892	327,570
	July 14-20	1,819	329,389
	July 21-27	4,043	333,432
	July 28-August 3	165	333,607
311-North Unimak	June 19-15	729	729
	June 16-22	2,311	3,040
	June 23-29	1,175	4,215
	June 30-July 6	--	4,215
	July 7-13	445	4,660
312-Izembek Bay	June 30-July 6	2,402	2,402
	July 7-13	2,758	5,160
	July 14-20	4,187	9,347
	July 21-27	356	9,703
	July 28-Aug. 3	1,204	10,907
	Aug. 4-10	159	11,066
313-Nelson Lagoon	May26-June 1	1	1
	June 2-8	140	141
	June 9-15	2,681	2,822
	June 16-22	9,703	12,525
	June 23-29	11,152	23,677
	June 30-July 6	10,203	33,880
	July 7-13	4,954	38,834
	July 14-20	7,458	46,292
	July 21-27	2,003	48,295
	July 28-August 3	1,739	50,034
	August 4-10	475	50,509
	August 11-17	458	50,967
	August 18-24	149	51,116
	August 25-31	8	51,124
	September 1-7	6	51,130
	September 8-14	--	51,130
	September 15-21	1	51,131
314-Port Moller	June 9-15	3	3
	June 16-22	274	277
	June 23-29	2,402	2,679
	June 30-July 6	550	3,229
	July 7-13	128	3,357

3/ Note: Only the June catch could have any influence on the North Side Peninsula fishery.

TABLE 84

NORTH SIDE ALASKA PENINSULA AND SOUTH UNIMAK FISHERY
SOCKEYE SALMON CATCH BY WEEK, BY STATISTICAL AREA, 1968
(Cont'd)

Area of catch	Week of catch 1/	Sockeye salmon catch 2/	Accumulative catch
315-Bear River	June 16-22	649	649
Sandy River	June 23-29	12,611	13,260
	June 30-July 6	11,478	24,738
	July 7-13	20,483	45,221
	July 14-20	--	45,221
	July 21-27	19,423	64,644
	July 28-August 3	7,150	71,794
	August 4-10	14,319	86,113
	August 11-17	4,403	90,516
316-Ilnik	June 30-July 6	47,764	47,764
	July 7-13	16,138	63,902
	July 14-20	12,948	76,850
	July 21-27	1,746	78,596

APPENDIX

APPENDIX TABLE 1. NUSHAGAK-MULCHATNA FINAL DAILY RED SALMON ESCAPEMENT, 1968.

Date	Daily Counts	Daily percent of total	Accumulative counts
6/26	0	0.00	0
27	318	0.25	318
28	1,632	1.27	1,950
29	2,550	1.98	4,500
30	2,436	1.89	6,936
7/ 1	5,202	4.04	12,138
2	1,374	1.07	13,512
3	1,500	1.17	15,012
4	2,946	2.29	17,958
5	10,794	8.39	28,752
6	15,408	11.97	44,160
7	9,660	7.51	53,820
8	19,716	15.32	73,536
9	11,166	8.68	84,702
10	10,512	8.17	95,214
11	11,478	8.92	106,692
12	8,772	6.82	115,464
13	5,604	4.35	121,068
14	1,548	1.20	122,616
15	2,553	1.98	125,169
16	2,217	1.72	127,386
17	618	0.48	128,004
18	270	0.21	128,274
19	168	0.13	128,442
20	96	0.07	128,538
21	42	0.03	128,580
22	18	0.01	128,598
23	90	0.07	128,688
24	18	0.01	128,706
25	6	0.00	128,712
Total	128,712	100.00	128,712

APPENDIX TABLE 2

NUSHAGAK COMMERCIAL CATCH
SEX COMPOSITION OF SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. In Samples		Percent		Commercial Catch	No. In Catch	
		Males	Females	Males	Females		Males	Females
-6/27	13	269	336	44.46	55.54	140,386	62,416	77,970
6/28-7/3	7	377	343	52.36	47.64	336,277	176,075	160,202
7/4-	5	245	262	48.32	51.68	189,172	91,408	97,764
Total	25	891	941	49.55	50.45	665,835	329,899	335,936

APPENDIX TABLE 3

NUSHAGAK COMMERCIAL CATCH
AGE COMPOSITION OF MALE SOCKEYE SALMON BY FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	Age Group 3_1	4_1	4_2	5_1	5_2	5_3	6_2	6_3	7_4	Total
						Percent						
5/17-6/27	13	269	-	0.37	29.74	-	62.09	3.34	-	4.09	0.37	100.00
6/28-7/3	7	377	-	1.59	19.90	0.26	72.15	3.71	0.53	1.59	0.26	100.00
7/4-	5	245	0.82	1.22	31.02	0.41	47.76	12.65	-	6.12	-	100.00
TOTALS												
WEIGHTED PERCENTAGES												

APPENDIX TABLE 4

NUSHAGAK COMMERCIAL CATCH
AGE COMPOSITION OF FEMALE SOCKEYE SALMON CATCH FISHING PERIOD, 1968

Period	No. of Samples	No. of Fish	4_1	4_2	5_2	5_3	6_3	Total
5/17-6/27	13	336	0.60	9.23	78.56	4.17	7.44	100.00
6/28-7/3	7	343	1.75	13.99	76.68	4.96	2.62	100.00
7/4-	5	262	2.29	37.02	47.72	9.92	3.05	100.00
TOTALS	25	941						
WEIGHTED PERCENTAGES			1.64	19.59	68.69	6.22	3.86	

APPENDIX TABLE 5

NUSHAGAK COMMERCIAL CATCH, AGE COMPOSITION OF
SOCKEYE SALMON, BOTH SEXES COMBINED, 1968

	Age Group									
	3_1	4_1	4_2	5_1	5_2	5_3	6_2	6_3	7_4	Total
MALES:										
Number	750	4,146	81,956	833	209,447	20,198	933	10,947	689	329,899
Percent	0.23	1.26	24.84	0.25	63.49	6.12	0.28	3.32	0.21	100.00
FEMALES:										
Number	-	5,511	65,811	-	230,739	20,895	-	12,980	-	335,936
Percent	-	1.64	19.59	-	68.69	6.22	-	3.86	-	100.00
SEXES COMBINED:										
Number	750	9,657	147,767	833	440,186	41,093	933	23,927	689	665,835
Percent	0.11	1.45	22.20	0.12	66.12	6.17	0.14	3.59	0.10	100.00

APPENDIX TABLE 6

AVERAGE WEIGHT BY AGE CLASS OF SOCKEYE SALMON BY DISTRICT, 1968

Naknek-Kvichak District

1-Ocean			2-Ocean			3-Ocean			4-Ocean		
Age	Wt.	N	Age	Wt.	N	Age	Wt.	N	Age	Wt.	N
3_2	1.5	1	4_2	4.9	136	5_2	7.0	55	-	-	-
4_3	1.7	2	5_3	5.2	108	6_3	7.5	75			
			6_4	5.6	2	7_4	8.4	1			
Ave.	1.6	3	Ave.	5.0	246	Ave.	7.3	131	Ave.	-	-

Egegik District

1-Ocean			2-Ocean			3-Ocean			4-Ocean		
Age	Wt.	N	Age	Wt.	N	Age	Wt.	N	Age	Wt.	N
3_2	-	-	4_2	5.1	51	5_2	6.9	43	7_3	-	-
4_3	-	-	5_3	5.2	108	6_3	7.3	91			
			6_4	-	-	7_4	7.2	6			
Ave.	-	-	Ave.	5.2	159	Ave.	7.2	140	Ave.	-	-

Nushagak District

1-Ocean			2-Ocean			3-Ocean			4-Ocean		
Age	Wt.	N	Age	Wt.	N	Age	Wt.	N	Age	Wt.	N
3_2	3.6	1	3_1	5.2	2	4_1	7.1	2	5_1	-	-
4_3	-	-	4_2	5.1	126	5_2	7.2	215	6_2	-	-
			5_3	5.6	31	6_3	7.3	12	7_3		
						7_4					
Ave.	3.6	1	Ave.	5.2	159	Ave.	7.2	229	Ave.	-	-

Togiak District

1-Ocean			2-Ocean			3-Ocean			4-Ocean		
Age	Wt.	N	Age	Wt.	N	Age	Wt.	N	Age	Wt.	N
3_2	-	-	3_1	-	-	4_1	6.7	7	6_2	-	-
			4_2	5.5	106	5_2	7.6	320			
			5_3	5.7	52	6_3	7.9	54			
						7_4	-	-			
Ave.	-	-	Ave	5.6	158	Ave.	7.6	381	Ave.	-	-

APPENDIX TABLE 7

AVERAGE WEIGHT OF SOCKEYE SALMON
IN THE COMMERCIAL CATCH, BY DISTRICT, 1968[1/]

District	Average Weight
Naknek-Kvichak	5.8
Egegik	6.1
Ugashik	5.9
Nushagak-Igushik	6.5
Togiak	7.0
Total Bay	6.1

1/ Average weight of fish by age group in random sample weighted by numbers of fish in each age group in catch irrespective of sex.

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